

X. SCHOOLS AND LIBRARIES

A. Overview

424. For the first time, the 1996 Act includes schools and libraries among the explicit beneficiaries of universal service support. The legislative history indicated that Congress intended to ensure that eligible schools and libraries have affordable access to modern telecommunications and information services that will enable them to provide educational services to all parts of the nation.¹⁰⁸⁶

425. We adopt the Joint Board's recommendation that all eligible schools and libraries¹⁰⁸⁷ should receive discounts of between 20 percent and 90 percent on all telecommunications services, Internet access, and internal connections provided by telecommunications carriers, subject to a \$2.25 billion annual cap. We take this action pursuant to section 254(c)(3) and section 254(h)(1)(B) rather than section 254(h)(2)(A) on which the Joint Board relied. We note that the Joint Board did not suggest that these services are not covered by section 254(h)(1)(B); it merely chose to rely on section 254(h)(2). As to installation and maintenance of internal connections, the Joint Board explicitly rejected the argument that these services are ineligible for support under section 254(h)(1) because they are "goods" or "facilities" rather than "services."¹⁰⁸⁸ In addition, any funds that are not disbursed in a given year shall be carried forward and may be disbursed in subsequent years without regard to the cap. We agree with the Joint Board that schools and libraries should have maximum flexibility to purchase the package of services they believe will most effectively meet their communications needs. We also share the Joint Board's preference that we foster competition from non-telecommunications carriers. We, therefore, encourage those providers to enter into partnerships or joint ventures with telecommunications carriers. In addition, pursuant to sections 254(h)(2) and 4(i), we extend support for the provision of discounted services by non-telecommunications carriers, within the overall annual cap mentioned above. We also concur with the Joint Board and conclude that economically disadvantaged schools and libraries, as well as schools and libraries located in high cost areas, shall receive greater discounts to ensure that they have affordable access to supported services. Finally, we agree with the Joint Board's conclusion that schools and libraries should be required to comply with several self-certification requirements, each designed to ensure that only eligible entities receive universal support and that they have adopted plans for securing cost-effective access to and use of all of the services purchased from telecommunications carriers under section 254(h)(1) and non-telecommunications carriers under

¹⁰⁸⁶ Joint Explanatory Statement at 132.

¹⁰⁸⁷ The term "school" includes individual schools, school districts, and consortia of schools and/or school districts. The term "library" includes individual library branches, library facilities, library systems, and library consortia.

¹⁰⁸⁸ See Recommended Decision, 12 FCC Rcd at 330, 331.

sections 254(h)(2) and 4(i).

B. Telecommunications Carrier Functionalities and Services Eligible for Support

1. Background

426. Telecommunications Services and Internet Access. Section 254 defines the services that are to be supported for schools and libraries in terms of "telecommunications services,"¹⁰⁸⁹ "special" or "additional" services,¹⁰⁹⁰ and access to "advanced telecommunications and information services."¹⁰⁹¹ Congress recognized the importance of telecommunications and related services to schools and libraries when it enacted the 1996 Act:

The provisions of subsection [254] (h) will help open new worlds of knowledge, learning and education to all Americans -- rich and poor, rural and urban. They are intended, for example, to provide the ability to browse library collections, review the collections of museums, or find new information on the treatment of illness, to Americans everywhere via schools and libraries. This universal access will assure that no one is barred from benefiting from the power of the Information Age.¹⁰⁹²

427. Section 254(c)(3) states that "[i]n addition to the services included in the definition of universal service under paragraph [c] (1), the Commission may designate additional services for such support mechanisms for schools, [and] libraries . . . for the purposes of subsection [254] (h)."¹⁰⁹³ Section 254(h)(2) states that "[t]he Commission shall establish competitively neutral rules to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and non-profit elementary and secondary school classrooms . . . and libraries."¹⁰⁹⁴ Moreover, in its consideration of "additional" services under section 254(c)(3), Congress authorized the Commission to specify a distinct definition of universal service that would apply only to public

¹⁰⁸⁹ 47 U.S.C. § 254(c)(1).

¹⁰⁹⁰ 47 U.S.C. § 254(c)(3).

¹⁰⁹¹ 47 U.S.C. § 254(h)(2)(A).

¹⁰⁹² Joint Explanatory Statement at 132-33.

¹⁰⁹³ 47 U.S.C. § 254(c)(3).

¹⁰⁹⁴ 47 U.S.C. § 254(h)(2)(A).

institutional telecommunications users.¹⁰⁹⁵ The conferees stated that they expected "the Commission and the Joint Board to take into account the particular needs of . . . K-12 schools and libraries."¹⁰⁹⁶

428. In the Recommended Decision, the Joint Board recommended that the Commission adopt rules that give schools and libraries the maximum flexibility to purchase whatever package of telecommunications services they believe will meet their telecommunications needs most effectively and efficiently.¹⁰⁹⁷ The Joint Board also recommended that the Commission make discounts for Internet access available to schools and libraries pursuant to section 254(h)(2)(A).¹⁰⁹⁸ According to the Joint Board, Internet access should be defined as basic conduit, i.e., non-content access from the school or library to the backbone Internet network, which would include the communications link to the Internet service provider, whether through dial-up access or via a leased line, the links to other Internet sites via the Internet backbone, generally provided by an Internet service provider for a monthly subscription fee, if applicable, and electronic mail.¹⁰⁹⁹ Finally, the Joint Board declined to recommend that a discount mechanism for other information services be established at this time.¹¹⁰⁰

429. Intra-School and Intra-Library Connections. Sections 254(b)(6) and 254(h)(2)(A) specifically refer to the provision of telecommunications and other services directly to classrooms. Section 254(b)(6) states that "elementary and secondary school *classrooms* should have *access* to advanced telecommunications services."¹¹⁰¹ Further, section 254(h)(2) provides that "[t]he Commission shall establish competitively neutral rules . . . to enhance, to the extent technically feasible and economically reasonable, *access* to advanced telecommunications and information services for all public and non-profit elementary and secondary school *classrooms*. . . and libraries."¹¹⁰² Congress explained that "[n]ew subsection (h) of Section 254 is intended to ensure that . . . elementary and secondary school *classrooms* and libraries have affordable *access*

¹⁰⁹⁵ Joint Explanatory Statement at 133.

¹⁰⁹⁶ Joint Explanatory Statement at 133.

¹⁰⁹⁷ Recommended Decision, 12 FCC Rcd at 321.

¹⁰⁹⁸ Recommended Decision, 12 FCC Rcd at 323.

¹⁰⁹⁹ Recommended Decision, 12 FCC Rcd at 323.

¹¹⁰⁰ Recommended Decision, 12 FCC Rcd at 324.

¹¹⁰¹ 47 U.S.C. § 254(b)(6) (emphasis added).

¹¹⁰² 47 U.S.C. § 254(h)(2) (emphasis added).

to modern telecommunications services."¹¹⁰³ Congress further stated that "[t]he ability of K-12 [kindergarten to 12th grade] *classrooms*, [and] libraries . . . to obtain *access* to advanced telecommunications services is critical to ensuring that these services are available on a universal basis."¹¹⁰⁴ In the floor debate, Senators Snowe and Rockefeller stated that, while 35 percent of schools have access to the Internet, only three percent of the nation's classrooms are connected to the Internet.¹¹⁰⁵ Senator Rockefeller noted that cost was a significant barrier to classrooms having access to the Internet.¹¹⁰⁶ The Further Comment Public Notice asked explicitly whether section 254(h) contemplates that "inside wiring or other internal connections to classrooms may be eligible for universal service support of telecommunications services provided to schools and libraries" and requested estimates of the cost of such support.¹¹⁰⁷

430. In the Recommended Decision, the Joint Board recommended that the Commission permit schools and libraries to secure internal connections at a discount pursuant to section 254(h)(2)(A).¹¹⁰⁸ The Joint Board also recommended that the Commission establish competitively neutral rules that would provide support to any provider of internal connections that the school or library selects.¹¹⁰⁹

2. Discussion

a. Telecommunications Services

431. We adopt the Joint Board's recommendation,¹¹¹⁰ supported by many commenters,¹¹¹¹ to provide schools and libraries with the maximum flexibility to purchase from

¹¹⁰³ Joint Explanatory Statement at 132.

¹¹⁰⁴ Joint Explanatory Statement at 132-33 (emphasis added).

¹¹⁰⁵ 141 Cong. Rec. S7978, S7981 (daily ed. June 8, 1995).

¹¹⁰⁶ 141 Cong. Rec. S7978, 7981 (daily ed. June 8, 1995). *See infra* section X.C.3. for Senator Rockefeller's direct quotation.

¹¹⁰⁷ Further Comment Public Notice at question 7.

¹¹⁰⁸ Recommended Decision, 12 FCC Rcd at 330, 334.

¹¹⁰⁹ Recommended Decision, 12 FCC Rcd at 334.

¹¹¹⁰ Recommended Decision, 12 FCC Rcd at 321-322.

¹¹¹¹ *See, e.g.*, AFT comments at 1; ALA comments at 2; Ameritech comments at 18; APTS comments at 3-4; Brooklyn Public Library comments at 2; City of Seattle comments at 1; EDLINC comments at 4; New York Public Library comments at 1; USTA comments at 35; Atlanta Board of Education reply comments at 1; Fort Frye

telecommunications carriers whatever package of commercially available telecommunications services they believe will meet their telecommunications service needs most effectively and efficiently. We observe that Apple and the New York DOE ask us to focus support on T-1 or higher bandwidth access¹¹¹² and Netscape asks us to provide greater discounts on higher bandwidth connections to the Internet,¹¹¹³ while the Vermont PSB asks us to set greater discounts for more basic telecommunications services than for Internet access and internal connections.¹¹¹⁴ The contrasting views of New York and Vermont, and those revealed in the Florida PSC survey of 17 states,¹¹¹⁵ demonstrate how different states have set different priorities for meeting their schools' and libraries' varying needs and circumstances.

432. As the Joint Board recognized, the establishment of a single set of priorities for all schools and libraries would substitute our judgment for that of individual school administrators throughout the nation, preventing some schools and libraries from using the services that they find to be the most efficient and effective means for providing the educational applications they seek to secure.¹¹¹⁶ Given the varying needs and preferences of different schools and libraries and the relative advantages and disadvantages of different technologies, we agree with the Joint Board that individual schools and libraries are in the best position to evaluate the relative costs and benefits of different services and technologies.¹¹¹⁷ We also agree with the Ohio PUC and DOE that our actions should not disadvantage schools and libraries in states that have already aggressively invested in telecommunications technologies in their state schools and libraries.¹¹¹⁸ Because we will require schools and libraries to pay a portion of the

School District reply comments at 1; Vanderbilt reply comments at 2.

¹¹¹² Apple comments at 4; New York DOE comments at 6.

¹¹¹³ Netscape reply comments at 5.

¹¹¹⁴ Vermont PSB comments at 15.

¹¹¹⁵ Recommended Decision, 12 FCC Rcd at 322 (*citing* Florida PSC, *Promoting Educational Infrastructure and the Role of the Florida Public Service Commission* at 33-34 (May 1996)).

¹¹¹⁶ Recommended Decision, 12 FCC Rcd at 321.

¹¹¹⁷ Recommended Decision, 12 FCC Rcd at 322-23. Congress imposed no limits whatsoever on the telecommunications services for which eligible schools and libraries could arrange to receive discounts. We see no reason for limiting the nature of the telecommunications services that are covered under section 254(h)(1)(B) or the role they play in the operations of the institution. Eligible schools and libraries are equally free to obtain support under section 254(h)(1)(B) for plain old telephone service (POTS) lines to enable teachers to receive calls in the classroom, ISDN services that connect classroom and library computers with information services, private lines for connecting two school libraries to each other, or paging services to enable school security officials promptly to respond to hallway disturbances.

¹¹¹⁸ Ohio DOE comments at 4; Ohio PUC comments at 16-17.

costs of the services they select,¹¹¹⁹ we agree with the Joint Board that, as recognized by most commenters,¹¹²⁰ allowing schools and libraries to choose the services for which they will receive discounts is most likely to maximize the value to them of universal service support and to minimize inefficient uses of services.¹¹²¹

433. As the Joint Board observed, permitting schools and libraries full flexibility to choose among telecommunications services also eliminates the potential risk that new technologies will remain unavailable to schools and libraries until the Commission has completed a subsequent proceeding to review evolving technological needs.¹¹²² Thus, in an environment of rapidly changing and improving technologies, empowering schools and libraries, regardless of wealth and location, to choose the telecommunications services they will use as tools for educating their students will enable them to use and teach students to use state-of-the-art telecommunications technologies as those technologies become available.

434. We reject SBC's arguments that authorizing discounts for all telecommunications services would be "arbitrary, unreasonable, and otherwise unlawful," and would abdicate our responsibility to select a single set of services for schools and libraries.¹¹²³ We limit section 254(c)(3) telecommunications services to those that are commercially available, and we find no reason to interpret section 254(c)(3) to require us to adopt a more narrow definition of eligible services. We also reject New York DPS's assertion that our approach limits state flexibility to adopt intrastate programs.¹¹²⁴ We observe that a state preferring a program that targets a narrower or broader set of services may make state funds available to schools or libraries that purchase those services.

435. CTIA asks that the Commission go beyond simply allowing schools and libraries to choose wireless services to "preempt any [s]tate or local statutes or regulations which exclude, or have the effect of excluding, wireless carriers."¹¹²⁵ We conclude, however, that section 253 of

¹¹¹⁹ See *infra* section X.C.2.b.

¹¹²⁰ See, e.g., AFT comments at 1; ALA comments at 2; Ameritech comments at 18; APTS comments at 3-4; Brooklyn Public Library comments at 2; City of Seattle comments at 1; EDLINC comments at 4; New York Public Library comments at 1; USTA comments at 35; Atlanta Board of Education reply comments at 1; Fort Frye School District reply comments at 1; Vanderbilt reply comments at 2.

¹¹²¹ Recommended Decision, 12 FCC Rcd at 321.

¹¹²² Recommended Decision, 12 FCC Rcd at 322-23.

¹¹²³ SBC comments at 43-44, 49-50.

¹¹²⁴ New York DPS reply comments at 2.

¹¹²⁵ CTIA comments at 9-10 (footnote omitted).

the Act adequately preempts any state or local laws or regulations that would preclude wireless carriers from providing service to schools and libraries.¹¹²⁶ Specifically, section 253(a) provides that no state or local statute, regulation, or requirement may "prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."¹¹²⁷ Moreover, section 253(d) empowers the Commission to preempt any state or local statute, regulation, or legal requirement that prohibits any entity from providing interstate or intrastate telecommunications services.¹¹²⁸

b. Internet Access

436. Eligible Services. We also follow the Joint Board's recommendation, supported by many commenters,¹¹²⁹ that schools and libraries receive rate discounts from telecommunications carriers for basic "conduit" access to the Internet.¹¹³⁰ We conclude that sections 254(c)(3) and 254(h)(1), in the context of the broad policies set forth in section 254(h)(2), authorize us to permit schools and libraries to receive the telecommunications and information services provided by telecommunications carriers needed to use the Internet at discounted rates.

437. We observe that section 254(c)(3) grants us authority to "designate additional

¹¹²⁶ See 47 U.S.C. § 253.

¹¹²⁷ 47 U.S.C. § 253(a).

¹¹²⁸ See 47 U.S.C. § 253(d).

(d) PREEMPTION.-If, after notice and an opportunity for public comment, the Commission determines that a [s]tate or local government has permitted or imposed any statute, regulation, or legal requirement that violates subsection (a) or (b), the Commission shall preempt the enforcement of such statute, regulation, or legal requirement to the extent necessary to correct such violation or inconsistency.

Id.

¹¹²⁹ See, e.g., AOL comments at 4-8; Business Software Alliance comments at 1-2; CNMI comments at 36; Commercial Internet Exchange comments at 2-3; EDLINC comments at 4; Great City Schools comments at 2; Illinois State Library comments at 2; Juno Online comments at 4-7; Metricom comments at 2; NetAction comments at 6; North Dakota PSC comments at 2; Oracle comments at 1; People For comments at 10; Seattle comments at 1; Atlanta Board of Education reply comments at 1; Colorado LEHTC reply comments at 2; Fort Frye School District reply comments at 1; GI reply comments at 1-2; NCTA reply comments at 5-7; Small Cable reply comments at 2. Cf. RTC comments at 43-44 (supporting the provision of toll-free dial-up Internet access for schools and libraries); Interior reply comments at 3 (same); NTIA reply comments at 29-30 (same).

¹¹³⁰ Recommended Decision, 12 FCC Rcd at 323.

services for support"¹¹³¹ and section 254(h)(1)(B) authorizes us to fund any section 254(c)(3) services.¹¹³² The generic universal service definition in section 254(c)(1)¹¹³³ and the rate provision regarding special services for rural health care providers in section 254(h)(1)(A)¹¹³⁴ are both explicitly limited to telecommunications services. In the education context, however, the statutory references are to the broad class of "services," rather than the narrower class of "telecommunications services." Specifically, section 254(c)(3) refers to "additional services,"¹¹³⁵ while section 254(h)(1)(B) refers to "any of its services";¹¹³⁶ neither provision refers to the narrower class of telecommunications services. In addition, sections 254(a)(1) and (a)(2) mandate that the Commission define the "services that are supported by Federal universal service support mechanisms" but does not limit support to telecommunications services.¹¹³⁷ The use of the broader term "services" in section 254(a) provides further validation for the inclusion of services in addition to telecommunications services in sections 254(c)(3) and 254(h)(1)(B).

438. Some parties challenge our authority to support services other than telecommunications services, arguing that the various sections of section 254 referring to "services" must be read in concert.¹¹³⁸ For example, BellSouth maintains that section 254(c)(1) defines universal service as "an evolving level of telecommunications services,"¹¹³⁹ while AT&T notes that the subsequent references to "additional services" in section 254(c)(3) relate directly back to the "telecommunications services" referenced in section 254(c)(1).¹¹⁴⁰ Had Congress intended to so limit the section 254(c)(3) additional services, however, it would have used the phrase "additional telecommunications services" rather than the broader term "additional services" that it chose to use.

¹¹³¹ 47 U.S.C. § 254(c)(3).

¹¹³² 47 U.S.C. § 254(h)(1)(B).

¹¹³³ 47 U.S.C. § 254(c)(1).

¹¹³⁴ 47 U.S.C. § 254(h)(1)(A).

¹¹³⁵ 47 U.S.C. § 254(c)(3).

¹¹³⁶ 47 U.S.C. § 254(h)(1)(B).

¹¹³⁷ 47 U.S.C. § 254(a)(2).

¹¹³⁸ See, e.g., ALLTEL comments at 5; Ameritech comments at 18-19; AT&T comments at 19-20; BellSouth comments at 22-25; Citizens Utilities comments at 11-13; GTE comments at 89-95; PacTel comments at 37-41; SBC comments at 43-44; USTA comments at 35; GCI reply comments at 13.

¹¹³⁹ BellSouth comments at 22 (*citing* 47 U.S.C. § 254(c)(1)) (emphasis omitted).

¹¹⁴⁰ AT&T comments at 19.

439. We also reject BellSouth's argument that the fact that section 254(h) is entitled "Telecommunications Services for Certain Providers" leads to the conclusion that the only services covered by that subsection are telecommunications services.¹¹⁴¹ To the contrary, within section 254(h) Congress specified which services must be "telecommunications services" in order to be eligible for support. As noted above, the rate provision regarding special services for rural health care providers, section 254(h)(1)(A), is explicitly limited to "telecommunications services."¹¹⁴² Thus, the term used in section 254(h)(1)(B), "any of its *services* that are within the definition of universal service under subsection (c)(3),"¹¹⁴³ cannot be read as a generic reference to the heading of that section. Rather, the varying use of the terms "telecommunications services" and "services" in sections 254(h)(1)(A) and 254(h)(1)(B) suggests that the terms were used consciously to signify different meanings. In addition, the mandate in section 254(h)(2)(A) to enhance access to "advanced telecommunications and information services,"¹¹⁴⁴ particularly when read in conjunction with the legislative history as discussed below, suggests that Congress did not intend to limit the support provided under section 254(h) to telecommunications services. We conclude, therefore, that we can include the "information services," e.g., protocol conversion¹¹⁴⁵ and information storage, that are needed to access the Internet, as well as internal connections,¹¹⁴⁶ as "additional services" that section 254(h)(1)(B), through section 254(c)(3),

¹¹⁴¹ BellSouth comments at 23.

¹¹⁴² 47 U.S.C. § 254(h)(1)(A).

¹¹⁴³ 47 U.S.C. § 254(h)(1)(B) (emphasis added).

¹¹⁴⁴ 47 U.S.C. § 254(h)(2)(A).

¹¹⁴⁵ The Commission has previously stated that both protocol conversion and protocol processing are information services under the 1996 Act. *See* Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, CC Docket No. 96-149, *First Report and Order and Further Notice of Proposed Rulemaking*, FCC 96-489, para. 104 (rel. Dec. 24, 1996). The Common Carrier Bureau defined the term "protocol conversion" as "the specific form of protocol processing that is necessary to permit communications between disparate terminals or networks." *See* IDCMA Petition for a Declaratory Ruling That AT&T's Frame Relay Service Is a Basic Service," *Memorandum Opinion and Order*, 10 FCC Rcd 13,717, 13,717-18 n.5 (1995) (*Frame Relay Order*). The *Frame Relay Order* also defined "protocol processing" as "a generic term, which subsumes 'protocol conversion' and refers to the use of computers to interpret and react to the protocol symbols as the information contained in a subscriber's message is routed to its destination." *Id.* *See also* Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, *Order on Reconsideration*, CC Docket 96-149, FCC 97-52, paras. 2-3 (rel. Feb. 19, 1997) (noting that there are three categories of protocol processing services that the Commission has treated as basic services in the past and will now treat as telecommunications services).

¹¹⁴⁶ *See infra* section X.B.2.c.

authorizes us to support.¹¹⁴⁷

440. In this regard, section 254(h)(2)(A), which directs the Commission to establish competitively neutral rules to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services, informs our interpretation of sections 254(c)(3) and 254(h)(1)(B) as allowing schools and libraries to receive discounts on rates from telecommunications carriers for Internet access.¹¹⁴⁸ Given the directive of section 254(h)(2)(A) that the Commission enhance the *access* that schools and libraries have to "information services," as described in the legislative history, i.e., actual educational content, we conclude that there should be discounts for access to these services provided by telecommunications carriers under the broad provisions of sections 254(c)(3) and 254(h)(1)(B).

441. Ameritech and Citizen Utilities argue that the reference in section 254(h)(2)(A) to providing schools and libraries with "access" to information services does not direct the Commission to provide discounts to schools and libraries for the information services provided by Internet service providers, but rather, only to the telecommunications services necessary for them to reach those Internet service providers.¹¹⁴⁹ We conclude, however, that Ameritech and Citizen Utilities are confusing two different types of information services. We do not grant schools and libraries discounts on the cost of purchasing information content. We conclude, however, that we are authorized to provide discounts on the data links and associated services necessary to provide classrooms with access to those educational materials, even though these functions meet the statutory definition of "information services" because of their inclusion of protocol conversion and information storage. Without the use of these "information service" data links, schools and libraries would not be able to obtain access to the "research information, [and] statistics" available free of charge on the Internet. We note that these information services are essential for effective transmission service, i.e., "conduit" service; they are not elements of the content services provided by information publishers.¹¹⁵⁰ We conclude that our authority under sections 254(c)(3) and 254(h)(1)(B) is broad enough to achieve these section 254(h)(2)(A) goals.

442. Moreover, we note that the Joint Explanatory Statement stated that:

¹¹⁴⁷ NCTA reply comments at 6 (asserting that section 254(h)(2) "contemplates the inclusion of `access' as part of universal service without regard to the regulatory treatment of access services").

¹¹⁴⁸ 47 U.S.C. § 254(h)(2)(A).

¹¹⁴⁹ Ameritech comments at 18-19; Citizens Utilities comments at 11-14.

¹¹⁵⁰ EDLINC comments at 4 (noting that "[i]f schools and libraries are not eligible for discounts on what is fast-becoming a basic element in the communications network, the purpose of [s]ection 254 will not have been met").

For example, the Commission could determine that telecommunications and information services that constitute universal service for classrooms and libraries shall include dedicated data links and the ability to obtain access to educational materials, research information, statistics, information on Government services, reports developed by Federal, State and local governments, and information services which can be carried over the Internet.¹¹⁵¹

443. We find that this approach of providing discounts for basic conduit access to the Internet should not favor Internet access when provided as pure conduit versus Internet access bundled with minimal content; rather, this approach should simply encourage schools and libraries to select the most cost-effective form of transmission access, separate of content. We reject BellSouth's assertion that, by providing this support, we would usurp the power of local communities to act in this area, because communities would still be able to spend their own funds on whatever technologies or services they choose to purchase.¹¹⁵² Finally, we find no need to resolve the jurisdictional status of particular services provided by telecommunications carriers to schools and libraries through universal service support at this time, as Netscape urges us to do,¹¹⁵³ because the schools and libraries discount program we adopt will only become effective in states that set intrastate discounts that match the interstate discounts.¹¹⁵⁴

444. We also offer a more precise definition of what "information services" will be eligible for discounts under this program in response to commenters¹¹⁵⁵ who challenge the feasibility of using the "basic, conduit" Internet access terminology that the Joint Board used to describe what aspects of Internet access are eligible for support.¹¹⁵⁶ We note that Congress described the conduit services we seek to cover in another context in the 1996 Act.¹¹⁵⁷ That is, in listing exceptions to the definition of "electronic publishing" in section 274 of the Act, Congress described certain services that are precisely the types of "conduit" services that we agree with the

¹¹⁵¹ Joint Explanatory Statement at 133.

¹¹⁵² BellSouth comments at 27.

¹¹⁵³ Netscape comments at 6-7.

¹¹⁵⁴ See *infra* section X.C.2.f. for a discussion of interstate and intrastate discounts.

¹¹⁵⁵ See AOL comments at 6; Netscape reply comments at 6.

¹¹⁵⁶ Recommended Decision, 12 FCC Rcd at 323.

¹¹⁵⁷ See, e.g., 47 U.S.C. § 274(h)(2)(B) and (C) (dealing with certain exceptions to the definition of "electronic publishing," including, among other things, the transmission of information as "a common carrier" and as "part of a gateway to an information service").

Joint Board should be available to eligible schools and libraries at a discount.¹¹⁵⁸ We adopt the descriptions of those services here because we find that they provide the additional clarification of conduit services that commenters request.¹¹⁵⁹ We conclude that eligible schools and libraries will be permitted to apply their relevant discounts to information services provided by entities that consist of:

- (i) the transmission of information as a common carrier;
- (ii) the transmission of information as part of a gateway to an information service, where that transmission does not involve the generation or alteration of the content of information but may include data transmission, address translation, protocol conversion, billing management, introductory information content, and navigational systems that enable users to access information services that do not affect the presentation of such information services to users; and
- (iii) electronic mail services [e-mail].¹¹⁶⁰

As recommended by the Joint Board, other information services, such as voice mail, shall not be eligible for support at this time.¹¹⁶¹

445. We also follow the Joint Board's recommendation to grant schools and libraries discounts on access to the Internet but not on separate charges for particular proprietary content or other information services.¹¹⁶² The Joint Board recommended that we solve the problem of bundling content and "conduit" (access) to the Internet by not permitting schools and libraries to purchase a package including content and conduit, unless the bundled package included minimal content and provided a more cost-effective means of securing non-content access to the Internet than other non-content alternatives. We agree with this approach.

446. Therefore, consistent with the Joint Board's recommendation, schools and libraries that purchase, from a telecommunications carrier, access to the Internet including nothing more than the services listed above will be eligible for support based on the purchase price. In addition, if it is more cost-effective for it to purchase Internet access provided by a telecommunications carrier that bundles a minimal amount of content with such Internet access,

¹¹⁵⁸ 47 U.S.C. § 274(h)(2)(B) and (C).

¹¹⁵⁹ We note that we are not incorporating the definitions from section 274(h)(2) here, but merely using them as a model for universal service purposes. Thus, our use of section 274 should not imply anything about the classification of services in other contexts.

¹¹⁶⁰ *Cf.* 47 U.S.C. § 274(h)(2).

¹¹⁶¹ Recommended Decision, 12 FCC Rcd at 324.

¹¹⁶² Recommended Decision, 12 FCC Rcd at 323-24.

a school or library may purchase that bundled package and receive support for the portion of the package price that represents the price for the services listed above.

447. This approach will create three possible scenarios for schools and libraries. First, if the telecommunications carrier bundles access with a package of content that is otherwise available free of charge on the Internet because the content is advertiser-supported, bundling that content with Internet access will not permit the telecommunications carrier to recover any additional remuneration other than the fee for the access. Second, if the telecommunications carrier offers other Internet users access to its proprietary content for a price, it may treat the difference between that price and the price it charges for its access only package as the price of non-content Internet access. For example, if an IXC offers a \$50.00 per month service that includes unlimited Internet access, as well as free access to particular proprietary educational software services, and the proprietary services are available independently for \$30.00 per month, schools and libraries purchasing such a package will be eligible for support on $\$50.00 - \$30.00 = \$20.00$ per month. Third, if a telecommunications carrier providing Internet access offers a bundled package of content that it does not offer on an unbundled basis and thus, the fair price of the conduit element cannot be ascertained readily, the school or library may receive support for such an Internet access package only if it can affirmatively show that the price of the carrier's Internet access package was still the most cost-effective manner for the school or library to secure basic, conduit access to the Internet.

448. AOL and Netscape suggest imposing a cap on the rates for Internet access for which a service provider will be compensated from universal service support mechanisms.¹¹⁶³ AOL asserts that schools and libraries finding it to be the best service for gaining access to the Internet should be able to receive a discount on AOL's service, even if that service is not less expensive than some pure conduit service. AOL also suggests that schools and libraries be permitted to recover the entire amount of bundled content and conduit, subject to a cap based on a nationwide average charge for Internet access.¹¹⁶⁴ We find the record lacking in many details of how this approach would work, including how a nationwide average of Internet access rates would be calculated and why such an average would not also include an average charge for the proprietary content included by some Internet access providers. Therefore, we find it impractical to adopt this approach at this time.

449. Eligible Providers. Section 254(e) states that only an "eligible telecommunications carrier" under section 214(e) may receive universal service support.¹¹⁶⁵ Section 254(h)(1)(B)(ii), however, states that telecommunications carriers providing services to

¹¹⁶³ AOL comments at 6-7; AOL reply comments at 8-9; Netscape reply comments at 6.

¹¹⁶⁴ AOL comments at 6.

¹¹⁶⁵ 47 U.S.C. § 254(e).

schools and libraries may receive reimbursement from universal service support mechanisms, notwithstanding the provisions of section 254(e).¹¹⁶⁶ Consequently, we agree with the Joint Board in concluding that Congress intended that any telecommunications carrier, even one that does not qualify as an "eligible telecommunications carrier," should be eligible for support for services provided to schools and libraries.¹¹⁶⁷ We anticipate that Internet service providers may subcontract with IXCs and LECs that were not already providing Internet access to begin to provide such access to the Internet, and we encourage small businesses to form such joint ventures. We expect that the resulting competition will generate low pre-discount prices for schools and libraries, without regard to direct participation by non-telecommunications carriers as provided below.

c. Intra-School and Intra-Library Connections

450. Support for Internal Connections. We agree with the Joint Board's analysis of the internal connection issue,¹¹⁶⁸ as well as the reasoning numerous commenters offer for supporting that analysis.¹¹⁶⁹ Congress intended that telecommunications and other services be provided directly to classrooms.¹¹⁷⁰ Therefore, eligible schools and libraries may, under sections 254(c)(3) and 254(h)(1), secure support for installation and maintenance of internal connections, among other services and functionalities provided by telecommunications carriers.

451. We find that, as discussed above, the Act permits universal service support for an expanded range of services beyond telecommunications services.¹¹⁷¹ Specifically, we conclude that the installation and maintenance of internal connections fall within the broad scope of the universal service support provisions of sections 254(c)(3) and (h)(1)(B), in the context of the broad goals of section 254(h)(2)(A). Nothing in section 254 excludes internal connections from the scope of "additional services" for schools and libraries that can be designated for support under section 254(c)(3) or the corresponding services for which schools and libraries can receive

¹¹⁶⁶ 47 U.S.C. § 254(h)(1)(B)(ii).

¹¹⁶⁷ Recommended Decision, 12 FCC Rcd at 323.

¹¹⁶⁸ Recommended Decision, 12 FCC Rcd at 330.

¹¹⁶⁹ See, e.g., AFT comments at 1; CNMI comments at 36; CTIA comments at 10; EDLINC comments at 3; Great City Schools comments at 2; ITI comments at 7; MassLibrary comments at 1; Mississippi comments at 4; NetAction comments at 6; New Jersey Advocate comments at 8-9; Oracle comments at 14-18; Owen J. Roberts School District comments at 1; People For comments at 10; TCI comments at 8-9; Charles S. Robb reply comments at 2; CWA reply comments at 3; GI reply comments at 2; Ohio PUC reply comments at 13-15; Vanderbilt reply comments at 3-4.

¹¹⁷⁰ See 47 U.S.C. § 254(b)(6); 47 U.S.C. § 254(h)(2)(A); Joint Explanatory Statement at 132-33.

¹¹⁷¹ See *supra* section X.B.2.b.

discounts under section 254(h)(1)(B). AirTouch, Cincinnati Bell, and GTE assert that we cannot provide universal service support for internal connections because the Commission has already deregulated inside wiring, i.e., designated it as a non-common carrier service.¹¹⁷² Consistent with our finding that a broad set of services should be supported, we also find that we should not limit support to just those services that are offered on a common carrier basis. Cincinnati Bell also contends that, because internal connections have been deregulated for some time and the market is competitive, schools and libraries have opportunities to solicit bids from many different providers and to negotiate for discounts to meet their needs, so there is no need to provide discounts on internal connections.¹¹⁷³ In contrast, many education representatives submitted comments urging the Joint Board and the Commission to discount internal connections because the cost of internal connections constitutes a significant barrier to technology deployment. These comments suggest that the fact that a service has been deregulated and that competition has developed in some instances does not provide conclusive evidence that in all circumstances, schools and libraries will benefit from competition such that services will be affordable to them or that no additional discount is needed. The Act does not distinguish between competitive and non-competitive services in developing a program to establish explicit universal service support mechanisms.¹¹⁷⁴ Indeed, we hope that all of the services provided by telecommunications carriers will, over time, become both competitive and unregulated.

452. We agree with the Joint Board's response to those parties arguing that the physical facilities providing intraschool and intralibrary connections are "goods" or "facilities" rather than section 254(c)(3) "services."¹¹⁷⁵ The Joint Board observed that not only are the *installation and maintenance* of such facilities services, but the cost of the actual facilities may be relatively small compared to the cost of labor involved in installing and maintaining internal connections. The Joint Board noted that the D.C. Circuit has repeatedly referred to the installation and maintenance of inside wiring as services.¹¹⁷⁶ The Joint Board also noted that adopting the opposite view would treat internal connections as a facility ineligible for support if a school purchased it but as a service eligible for support if a school leased the facility from a third

¹¹⁷² AirTouch comments at 20; Cincinnati Bell comments at 14; GTE comments at 89-91.

¹¹⁷³ Cincinnati Bell comments at 14.

¹¹⁷⁴ See 47 U.S.C. § 254(h)(1)(B).

¹¹⁷⁵ Recommended Decision, 12 FCC Rcd at 330. Cf. EDLINC comments at 3-4.

¹¹⁷⁶ Recommended Decision, 12 FCC Rcd at 331 & n.1583 (*citing, inter alia, NARUC v. FCC*, 880 F.2d 422, 430 (D.C. Cir. 1989) (stating that "charges for inside wiring services are separated from charges for basic transmission service")).

party.¹¹⁷⁷ Given that the provision of internal connections is a service, we conclude that we have authority to provide discounts on the installation and maintenance of internal connections under sections 254(c)(3) and 254(h)(1)(B).

453. We find further that the broad purposes of section 254(h)(2) support our authority for providing discounts for the installation and maintenance of internal connections by telecommunications carriers under sections 254(c)(3) and 254(h)(1)(B). As the Joint Board explained, section 254(h)(2)(A) states that "[t]he Commission shall establish competitively neutral rules . . . to *enhance*, to the extent technically feasible and economically reasonable, *access* to advanced telecommunications and information services for all public and nonprofit elementary and secondary school *classrooms* . . . and libraries."¹¹⁷⁸ The Joint Board recognized that a primary way to give "classrooms" *access* to advanced telecommunications and information services is to connect computers in each classroom to a telecommunications network.¹¹⁷⁹ We interpret the scope of sections 254(c)(3) and 254(h)(1)(B) as broad enough to cover the provision of discounts on internal connections provided by telecommunications carriers. Telecommunications carriers might well, of course, subcontract this business to non-telecommunications carriers.

454. We acknowledge that the cost of providing discounts for all internal connections for all unconnected schools and classrooms throughout the nation is substantial. We agree with the Joint Board, however, that the cost is economically reasonable and in the public interest.¹¹⁸⁰ The existence and popularity of NetDays throughout the nation¹¹⁸¹ demonstrate that providing internal connections is technically feasible. The willingness of individual states to fund installation and maintenance of internal connections¹¹⁸² is strong evidence that those states consider such expenditures to be economically reasonable in light of the positive educational

¹¹⁷⁷ Recommended Decision, 12 FCC Rcd at 331.

¹¹⁷⁸ 47 U.S.C. § 254(h)(2)(A) (emphasis added).

¹¹⁷⁹ Recommended Decision, 12 FCC Rcd at 331.

¹¹⁸⁰ Recommended Decision, 12 FCC Rcd at 332. Based on the *McKinsey Report* as adjusted, we estimate that the full cost of the telecommunications-related portion of internal connections, prior to the application of discounts, would be more than \$4 billion. McKinsey and Company, *Connecting K-12 Schools to the Information Superhighway* at 57 (1995) (*McKinsey Report*).

¹¹⁸¹ See <http://www.netday96.com> (website with general information on netdays). NetDay is a grassroots volunteer effort to wire schools so they can network their computers and connect them to the Internet. Labor and material are provided by volunteer support from companies, unions, parents, teachers, students, and school employees.

¹¹⁸² See, e.g., Ohio DOE comments at 2-3; South Central Bell Telephone Company (Tennessee) General Subscriber Services Tariff at A42.1.2 (effective February 20, 1996).

benefits they should generate.¹¹⁸³

455. We also agree with the Joint Board that the legislative history supports our finding that the installation and maintenance of internal connections are eligible for support. We note that, in its Joint Explanatory Statement, Congress explicitly refers repeatedly to "classrooms."¹¹⁸⁴ Reading these references, we conclude that Congress contemplated extending discounted service all the way to the individual classrooms of a school, not merely to a single computer lab in each school or merely to the schoolhouse door.¹¹⁸⁵

456. As further evidence that Congress intended that the installation and maintenance of internal connections be eligible for universal service support, the Joint Board noted that, during Senate consideration of this provision, Senators Snowe and Rockefeller emphasized that, at the time, 35 percent of public schools had access to the Internet, but only three percent of classrooms were connected to the Internet.¹¹⁸⁶ As the Joint Board also observed,¹¹⁸⁷ in his discussion of the Snowe-Rockefeller-Exon-Kerrey amendment, Senator Rockefeller cited the lack of funds to buy computer equipment as one reason for the lack of access to the Internet, but added that the expense of connecting classrooms to one another represents another significant barrier to gaining access.¹¹⁸⁸

¹¹⁸³ See, e.g., Russell Rothstein, *Networking K-12 Schools: Architecture Models and Evaluation of Costs and Benefits* (1996) (unpublished masters thesis, Massachusetts Institute of Technology) (discussing the educational benefits of using technology and the networked multimedia service) (*Rothstein Thesis*). The *Rothstein Thesis* was filed on the record in this proceeding when the author testified before the Joint Board on June 19, 1996.

¹¹⁸⁴ See Joint Explanatory Statement at 132-33.

¹¹⁸⁵ Recommended Decision, 12 FCC Rcd at 332.

¹¹⁸⁶ Recommended Decision, 12 FCC Rcd at 333 (*citing* 141 Cong. Rec. S7978, S7981 (daily ed. June 8, 1995)). More recent figures indicate that, at the present time, approximately 65 percent of public schools have access to the Internet and approximately 14 percent of public school classrooms are connected to the Internet. See U.S. Department of Education, National Center for Education Statistics, *Advanced Telecommunications in U.S. Public Elementary and Secondary Schools, Fall 1996* (February 1997).

¹¹⁸⁷ Recommended Decision, 12 FCC Rcd at 333.

¹¹⁸⁸ 141 Cong. Rec. at S7981 (daily ed. June 8, 1995):

[A]nother reason [for lack of access to the Internet], which becomes more serious as schools do scrape together the money for the one-time expense of buying equipment, is their inability to pay excessive rates to hook into those services. It is one thing to have the computer on the table or the desk. It is another to have that hooked up to the wall *and then through that wall to the other wall*. That is expensive.

457. As the Joint Board recognized, finding internal connections ineligible for support would skew the choices of schools and libraries to favor technologies such as wireless, in which internal connections are inseparable from external connection, over technologies such as conventional wireline, in which a distinction can be (and for unrelated reasons sometimes is) drawn, even when the latter would be the more economically efficient choice. We conclude, consistent with numerous letters that we have received from the schools and libraries communities,¹¹⁸⁹ that schools, school districts, and libraries are in the best position and should, therefore, be empowered to make their own decisions regarding which technologies would best accommodate their needs, how to deploy those technologies, and how to best integrate these new opportunities into their curriculum. Moreover, a situation in which certain technologies were favored over others would violate the overall principle of competitive neutrality adopted for purposes of section 254.¹¹⁹⁰ Of course, we by no means wish to discourage wireless technologies where they are the efficient solution; data suggest that wireless connections would already be the more efficient eligible "telecommunications service" for connecting schools to telephone carrier offices or Internet service providers for more than 25 percent of public schools.¹¹⁹¹ Nothing on the record or in the statute would appear to prevent schools and libraries from purchasing wireless technologies at a discount and using them for internal connections, and a wireless system can be used for both internal and external connections. If schools and libraries could not receive discounts from telecommunications carriers for internal connections through inside wiring, but could receive discounts from telecommunications carriers if using wireless service for this purpose, however, the discount mechanism would favor wireless technologies over wireline service. Because Congress intended to encourage competitive neutrality among technologies¹¹⁹² and because this is an explicit requirement under section 254(h)(2)(A), we conclude that Congress also intended to permit schools purchasing wireline intraschool connections to purchase those services from telecommunications carriers at discounted prices.¹¹⁹³

458. We reject the claims of GTE and Motorola that our program will favor wireline

Id. (emphasis added).

¹¹⁸⁹ See, e.g., Letter from Affordable Telecommunications for Rural American's Coalition to Comr. Susan Ness, FCC, dated April 11, 1997; Letter from Ted L. Triplett, Regional Education Service Agency, II, to Comr. Susan Ness, FCC, dated April 16, 1997; Letter from Gerald A. Mathias, Hampshire County Board of Education, to Comr. Susan Ness, dated April 17, 1997; Letter from Arnold C. Plank, Torrance Unified School District, to Comr. Susan Ness, dated April 30, 1997.

¹¹⁹⁰ Recommended Decision, 12 FCC Rcd at 334.

¹¹⁹¹ *McKinsey Report* at 58.

¹¹⁹² See *supra* section III (discussing adoption of competitive neutrality as a principle). See also *infra* section X.F.2. for a discussion of section 254(h)(2).

¹¹⁹³ Recommended Decision, 12 FCC Rcd at 334.

or other telecommunications carriers¹¹⁹⁴ because we are also providing discounts for services provided by wireless carriers. Moreover, in addition to our direct coverage of non-telecommunications carriers below,¹¹⁹⁵ we expect non-telecommunications carriers to compete to provide internal connections to schools and libraries by entering partnerships and joint ventures with telecommunications carriers. For example, an electrician or a cable television system operator might offer to subcontract with an IXC to provide, respectively, internal connections or a local area network (LAN) connecting schools in a district or libraries in a library system. Thus, without regard to our decision below to provide discounts for services to eligible schools and libraries provided by non-telecommunications carriers,¹¹⁹⁶ we conclude that our decision to provide discounts for services to eligible schools and libraries provided by telecommunications carriers is competitively neutral and will facilitate, not impede, the development of the internal connections market. Moreover, particularly in light of the legislative history, providing discounts for service to eligible schools and libraries provided by telecommunications carriers strongly serves the public interest.¹¹⁹⁷

459. Extent of Support for Internal Connections. We agree with SBC and Citizen Utilities that it is often difficult to distinguish between "internal connections," which would be eligible for discounts, and computers and other peripheral equipment, which would not be eligible.¹¹⁹⁸ While we also concur with AirTouch's observation that the Joint Board did not articulate a detailed "workable standard," we reject AirTouch's assertion that the distinction between internal connections eligible for support and services or equipment not eligible for support is "administratively unworkable."¹¹⁹⁹ We find that a given service is eligible for support as a component of the institution's internal connections only if it is necessary to transport information all the way to individual classrooms. That is, if the service is an essential element in the transmission of information within the school or library, we will classify it as an element of internal connections and will permit schools and libraries to receive a discount on its installation and maintenance for which the telecommunications carrier may be compensated from universal service support mechanisms.

460. Applying this standard, we agree with the Joint Board's recommendation that support should be available to fund discounts on such items as routers, hubs, network file

¹¹⁹⁴ GTE comments at 93-95; Motorola comments at 15.

¹¹⁹⁵ See *infra* section X.F.

¹¹⁹⁶ See *infra* section X.F.

¹¹⁹⁷ A similar analysis applies in the Internet access context.

¹¹⁹⁸ Citizens Utilities comments at 15; SBC comments at 45-46.

¹¹⁹⁹ AirTouch reply comments at 30.

servers,¹²⁰⁰ and wireless LANs and their installation and basic maintenance because all are needed to switch and route messages within a school or library.¹²⁰¹ Their function is solely to transmit information over the distance from the classroom to the Internet service provider, when multiple classrooms share the use of a single channel to the Internet service provider. We also agree with Oracle that "internal connections" would include the software that file servers need to operate and that we should place no specific restrictions on the size, i.e., type, of the internal connections network covered.¹²⁰² Consistent with the Joint Board's finding that the installation and maintenance of internal connections are services,¹²⁰³ we conclude that support should be available to fund discounts on basic installation and maintenance services necessary to the operation of the internal connections network. We expressly deny support, however, to finance the purchase of equipment that is not needed to transport information to individual classrooms. A personal computer in the classroom, for example, does not provide such a necessary transmission function and would not be supported, consistent with the Joint Board's recommendation.¹²⁰⁴ A personal computer is not intended to transmit information over a distance, unless it is programmed to operate as a network switch or network file server. Thus, a personal computer could not be installed, maintained, purchased, or leased at a discount for which the seller or lessor would be compensated from universal service support mechanisms, unless it was used solely as a switch or file server. Similarly, universal service support discounts will not be financed for fax machines or modems because they are not necessary to transmit information to individual classrooms. We also find that no universal service support will be provided for asbestos removal.

461. We recognize that some providers may offer a bundled package of services and facilities, only some of which are eligible for support. For example, some file servers may also be built to provide storage functions to supplement personal computers on the network. We do not intend to provide a discount on such CPE capabilities. We could address the issue of bundling by allowing the bundling of eligible and ineligible services, but requiring that reimbursement not be requested for more than the fair market value of the eligible services. Such an approach would be similar to our handling of discounts when eligible schools and libraries and other, ineligible entities form consortia through which to receive their

¹²⁰⁰ These items are the pieces of telecommunications equipment that the *McKinsey Report* identified as elements of the internal connections it priced in its cost estimates. See *McKinsey Report* at 58.

¹²⁰¹ Recommended Decision, 12 FCC Rcd at 332.

¹²⁰² Oracle comments at 16.

¹²⁰³ Recommended Decision, 12 FCC Rcd at 330-31.

¹²⁰⁴ Recommended Decision, 12 FCC Rcd at 332.

telecommunications services.¹²⁰⁵ In the case of service bundling, however, neither party to the transaction would have any incentive to ensure that the allocation of costs established in the contract was fair and nonarbitrary. In consortia, by contrast, the members each have an incentive to ensure that they are assigned a fair allocation of costs.

462. We conclude that eligible schools and libraries may not receive support for contracts that provide only a single price for a package that bundles services eligible for support with those that are not eligible for support. Schools and libraries may contract with the same entity for both supported and unsupported services and still receive support only if any purchasing agreement covering eligible services specifically prices those services separately from ineligible services so that it will be easy to identify the purchase amount that is eligible for a discount. Consequently, where the service provider indicates separately what the prices of the eligible and ineligible offerings would be if offered on an unbundled basis, the service provider must indicate the "price reduction" that would apply if the services are purchased together. The provider would then be able to apply the appropriate universal service support discount to the price for the eligible services after reducing the price to reflect a proportional amount of the "price reduction" the provider applied.¹²⁰⁶

463. Finally, we agree with those commenters asserting that schools and libraries should not be forced by the provider of internal connections to select a particular provider for other services.¹²⁰⁷ With respect to wireline internal connections, or inside wiring, we have previously addressed the rights of carriers and customers to carrier-installed inside wiring.¹²⁰⁸ In the *Detariffing Recon. Order*, we restricted the carriers' ability to interfere with customer access to inside wiring.¹²⁰⁹ We observe that the federal antitrust laws prohibit any provider of internal connections with monopoly power from using that power to distort competition in related markets.¹²¹⁰ Similarly, we agree with WinStar that, if a carrier does not currently charge for the

¹²⁰⁵ See *infra* section X.C.2.

¹²⁰⁶ For example, if a provider offered to sell a school an eligible service for \$10.00 and an ineligible service for \$20.00, but also offered the eligible and ineligible services as a bundle for \$24.00, this would indicate that the provider was offering a \$6.00, or 20%, price reduction. Therefore, the school could treat \$10.00 - 20% = \$8.00 as eligible for universal service support.

¹²⁰⁷ See, e.g., MFS comments at 32-33; WinStar comments at 7-9; WorldCom comments at 29.

¹²⁰⁸ See *Detariffing the Installation and Maintenance of Inside Wiring, Memorandum Opinion and Order*, 1 FCC Rcd 1190, 1195 (1986) (*Detariffing Recon. Order*), *further recon.*, 3 FCC Rcd 1719 (1988), *remanded*, *National Association of Regulatory Utility Commissioners v. FCC*, 880 F.2d 422 (D.C. Cir. 1989), *on remand*, *Third Report and Order*, 7 FCC Rcd 1334 (1992).

¹²⁰⁹ *Detariffing Recon. Order*, 1 FCC Rcd at 1195.

¹²¹⁰ See, e.g., *United States v. AT&T*, 552 F. Supp. 131, 161-63 (D.D.C. 1982).

use of internal connections, it should not be entitled to begin charging for such use if the school or library selects an alternate service provider,¹²¹¹ because that would distort the competitive neutrality supported strongly by both Congress and the Joint Board.¹²¹²

C. Discount Methodology

1. Background

464. Section 254(b)(5) establishes the principle that "[t]here should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service."¹²¹³ Section 254(b)(1) states that "[q]uality services should be available at just, reasonable, and affordable rates."¹²¹⁴ Furthermore, section 254(e) directs that any universal service support "should be explicit and sufficient to achieve the purposes of [section 254]."¹²¹⁵ Any mechanisms we adopt to support discounts on eligible services for schools and libraries must be consistent with these principles.

465. With respect to the support mechanisms designed for universal service to schools and libraries, section 254(h)(1)(B) gives even more specific instruction:

All telecommunications carriers serving a geographic area shall, upon a bona fide request for any of its services that are within the definition of universal service under subsection (c)(3), provide such services to elementary schools, secondary schools, and libraries for educational purposes at *rates less than the amounts charged for similar services to other parties*. The *discount* shall be an amount that the Commission, with respect to interstate services, and the States, with respect to intrastate services, determine is *appropriate and necessary to ensure affordable access to and use of such services by such entities*.¹²¹⁶

466. Congress emphasized affordability in the Joint Explanatory Statement when it stated that "[n]ew subsection (h) of section 254 is intended to ensure that . . . elementary and

¹²¹¹ WinStar comments at 8-9.

¹²¹² See *supra* section III.

¹²¹³ 47 U.S.C. § 254(b)(5).

¹²¹⁴ 47 U.S.C. § 254(b)(1).

¹²¹⁵ 47 U.S.C. § 254(e).

¹²¹⁶ 47 U.S.C. § 254(h)(1)(B) (emphasis added).

secondary school classrooms, and libraries have affordable access to modern telecommunications services that will enable them to provide . . . educational services to all parts of the Nation."¹²¹⁷ In addition, in the floor debates on the Snowe-Rockefeller-Exon-Kerrey amendment, Senator Snowe stated that, under section 254(h)(1)(B), "[b]y changing the basis for the discount from incremental cost to an amount necessary to ensure an affordable rate, the Federal-State joint board in conjunction with the FCC and the States have some flexibility to target discounts *based on a community's ability to pay*."¹²¹⁸

467. In the Recommended Decision, the Joint Board made several recommendations regarding the discount methodology. First, regarding the pre-discount price, which it defined as the price of services charged to schools and libraries prior to the application of a discount,¹²¹⁹ the Joint Board recommended that schools and libraries be required to seek competitive bids for all services eligible for section 254(h) discounts.¹²²⁰ The Joint Board also recommended that eligible schools and libraries be permitted to aggregate their needs for eligible services with those of both eligible and ineligible entities.¹²²¹

468. Second, the Joint Board recommended that the Commission adopt a matrix that provides discounts from 20 percent to 90 percent, to apply to all telecommunications services, Internet access, and internal connections, with the range of discounts correlated to the indicators of economic disadvantage and high cost for schools and libraries.¹²²² The Joint Board also recommended that the Commission set an annual cap on spending for schools and libraries of \$2.25 billion per year with a trigger mechanism, so that if expenditures in any year reach \$2 billion, rules of priority would come into effect.¹²²³

469. Third, the Joint Board recommended that the Commission consider how the cost of providing services varied between geographic areas when setting discounts for schools and libraries.¹²²⁴ The Joint Board suggested that it may be appropriate for the Commission to define

¹²¹⁷ Joint Explanatory Statement at 132.

¹²¹⁸ 141 Cong. Rec. S7984 (June 8, 1995) (emphasis added).

¹²¹⁹ Recommended Decision, 12 FCC Rcd at 361.

¹²²⁰ Recommended Decision, 12 FCC Rcd at 363.

¹²²¹ Recommended Decision, 12 FCC Rcd at 392.

¹²²² Recommended Decision, 12 FCC Rcd at 366, 370.

¹²²³ Recommended Decision, 12 FCC Rcd at 368, 370.

¹²²⁴ Recommended Decision, 12 FCC Rcd at 372.

high cost areas by considering the unseparated loop costs of the ILEC.¹²²⁵ The Joint Board noted that other methods for determining high cost may also be appropriate and encouraged the Commission to seek additional information and parties' comments on this issue prior to adopting rules.¹²²⁶

470. Fourth, the Joint Board recommended that the Commission provide a greater discount to economically disadvantaged schools and libraries for services within the definition of universal service.¹²²⁷ The Joint Board recommended that the level of economic disadvantage for schools be determined by eligibility for the national school lunch program, or some other appropriate measure.¹²²⁸ Because libraries do not participate in the national school lunch program, the Joint Board recommended that libraries be eligible for greater discounts if they are located in a school district serving economically disadvantaged students, but that the Commission seek additional information and parties' comments on what measures of economic disadvantage may be readily available to identify economically disadvantaged libraries.¹²²⁹

471. Fifth, the Joint Board addressed the relationship between any discount the Commission adopts and existing special rates that schools or libraries may already have negotiated with carriers or secured through state action.¹²³⁰ With regard to special rates mandated by a state, the Joint Board stated that, to the extent a state desires to supplement the discount financed through the federal universal service fund by permitting its schools and libraries to apply the discount to the special low rates, the Commission should fund the state's actions consistent with sections 254(h) and 254(f).¹²³¹ With regard to private contract rates, the Joint Board recommended that the Commission not require any schools or libraries that had secured a low price on service to relinquish that rate simply to secure a slightly lower price produced by including a large amount of federal support.¹²³²

472. Finally, the Joint Board recommended that the Commission adopt a mechanism to fund discounts on both interstate and intrastate services at the levels discussed above, and that a

¹²²⁵ Recommended Decision, 12 FCC Rcd at 372.

¹²²⁶ Recommended Decision, 12 FCC Rcd at 372.

¹²²⁷ Recommended Decision, 12 FCC Rcd at 372.

¹²²⁸ Recommended Decision, 12 FCC Rcd at 374.

¹²²⁹ Recommended Decision, 12 FCC Rcd at 376.

¹²³⁰ Recommended Decision, 12 FCC Rcd at 377.

¹²³¹ Recommended Decision, 12 FCC Rcd at 377.

¹²³² Recommended Decision, 12 FCC Rcd at 377.

state's setting intrastate discounts at least equal to the discounts on interstate services be a condition of federal universal service support for schools and libraries in that state.¹²³³

2. Discussion

a. Pre-Discount Price

473. In General. As the Joint Board recognized, the pre-discount price is the price of services to schools and libraries prior to the application of a discount.¹²³⁴ That is, the pre-discount price is the total amount that carriers will receive for the services they sell to schools and libraries: the sum of the discounted price paid by a school or library and the discount amount that the carrier can recover from universal service support mechanisms for providing such services.

474. Because we seek to ensure that pre-discount prices are established at the lowest "amounts charged [by providers] for similar services to other parties,"¹²³⁵ we must reject the arguments of EDLINC that we use a nationwide average pre-discount price.¹²³⁶ Using a nationwide average pre-discount price would almost certainly result in forcing providers in higher cost areas to provide service to schools and libraries without being able to recover their costs. In addition, using a nationwide average pre-discount price would permit providers in lower cost areas to recover more than their total cost of providing services to schools and libraries within their service areas.

475. Competitive Environment. As the Joint Board recognized, in a competitive marketplace, schools and libraries will have both the opportunity and the incentive to secure the lowest price charged to similarly situated non-residential customers for similar services, and providers of telecommunications services, Internet access, and internal connections will face competitive pressures to provide that price.¹²³⁷

476. We agree with the Joint Board that we should encourage schools and libraries to aggregate their demand with others to create a consortium with sufficient demand to attract competitors and thereby negotiate lower rates or at least secure efficiencies, particularly in lower

¹²³³ Recommended Decision, 12 FCC Rcd at 378.

¹²³⁴ Recommended Decision, 12 FCC Rcd at 361.

¹²³⁵ 47 U.S.C. § 254(h)(1)(B).

¹²³⁶ See EDLINC comments at 6.

¹²³⁷ Recommended Decision, 12 FCC Rcd at 362.

density regions.¹²³⁸ We concur with the Joint Board's finding that aggregation into consortia can also promote more efficient shared use of facilities to which each school or library might need access.¹²³⁹ For example, where five nearby schools might each seek use of a 1.5 Mbps link once a week, it might be more efficient for them to share a single 1.5 Mbps connection to a network server than for each school to purchase its own 1.5 Mbps link.

477. Thus, we agree with the Joint Board's objectives in recommending that eligible schools and libraries be permitted to aggregate their telecommunications needs with those of both eligible and ineligible entities, including health care providers and commercial banks, because the benefits from such aggregation outweigh the administrative difficulties.¹²⁴⁰ We are concerned, however, that permitting large private sector firms to join with eligible schools and libraries to seek prices below tariffed rates could compromise both the federal and state policies of non-discriminatory pricing. Thus, although we find congressional support for permitting eligible schools and libraries to secure prices below tariffed rates, we find no basis for extending that exception to enable all private sector firms to secure such prices.

478. For this reason, as described in more detail below, we adopt a slightly modified version of the Joint Board's recommendation. We conclude that eligible schools and libraries will generally qualify for universal service discounts and prices below tariffed rates for interstate services, only if any consortia they join include only other eligible schools and libraries, rural health care providers, and public sector (governmental) customers. Eligible schools and libraries participating in consortia that include ineligible private sector members will not be eligible to receive universal service discounts unless the pre-discount prices of any interstate services that such consortia receive from ILECs are generally tariffed rates. We conclude that this approach satisfies both the purpose and the intent of the Joint Board's recommendation because it should allow the consortia containing eligible schools and libraries to aggregate sufficient demand to influence existing carriers to lower their prices and should promote efficient use of shared facilities. This approach also includes the large state networks upon which many schools and libraries rely for their telecommunications needs among the entities eligible to participate in consortia. We recognize that state laws may differ from federal law with respect to non-discriminatory pricing requirements. We also recognize, however, that should states so choose, they may impose the same structure as detailed herein, on the basis of similar policies at the state level.

479. We agree with the Joint Board that, ideally, eligible schools and libraries will take full advantage of the competitive marketplace and the opportunity to aggregate with others to

¹²³⁸ Recommended Decision, 12 FCC Rcd at 362.

¹²³⁹ Recommended Decision, 12 FCC Rcd at 362.

¹²⁴⁰ Recommended Decision, 12 FCC Rcd at 362.

secure cost-based, pre-discount prices for the services they need.¹²⁴¹ We anticipate that competition to serve eligible schools and libraries will be vigorous in most markets. As NTIA observed to the Joint Board, "the most efficient use of the universal service fund support system should be promoted through the use of market-based techniques wherever possible."¹²⁴² Schools and libraries may not yet be fully aware of how the 1996 Act is forcing the opening of markets that were previously served by monopolies. For example, many schools and libraries may be unaware of the studies concluding that wireless service providers may offer the best prices to 27 percent of all schools for connecting to the Internet.¹²⁴³ Schools and libraries may also not know that cable systems currently pass more than 90 percent of homes nationwide,¹²⁴⁴ and thus that cable operators may offer to provide telecommunications service or access to the Internet over their networks, particularly where the cable operators have previously installed an institutional network (I-net) to all schools and libraries as part of a local cable television franchise agreement.

480. We, therefore, adopt the Joint Board's finding that fiscal responsibility compels us to require that eligible schools and libraries seek competitive bids for all services eligible for section 254(h) discounts.¹²⁴⁵ Competitive bidding is the most efficient means for ensuring that eligible schools and libraries are informed about all of the choices available to them. Absent competitive bidding, prices charged to schools and libraries may be needlessly high, with the result that fewer eligible schools and libraries would be able to participate in the program or the demand on universal service support mechanisms would be needlessly great. We discuss, in greater detail below, the procedures for undertaking the competitive bidding process.¹²⁴⁶

481. Some commenters ask us to clarify a number of points regarding competitive bidding. First, in response to a number of commenters,¹²⁴⁷ we note that the Joint Board intentionally did not recommend that the Commission require schools and libraries to select the lowest bids offered but rather recommended that the Commission permit schools and libraries

¹²⁴¹ Recommended Decision, 12 FCC Rcd at 362.

¹²⁴² Letter from Secretary Richard W. Riley, Department of Education, Secretary Daniel R. Glickman, Department of Agriculture, and Secretary Michael Kantor, Department of Commerce, to Chrm. Reed E. Hundt, FCC, dated October 7, 1996, at 7 (*transmitting* NTIA further comments) (NTIA NPRM submission).

¹²⁴³ See *McKinsey Report* at 58 (1995).

¹²⁴⁴ See Paul Kagan Associates, *Kagan Media Index* (1995).

¹²⁴⁵ Recommended Decision, 12 FCC Rcd at 363. See *supra* section X.D.2. for a further discussion of competitive bidding.

¹²⁴⁶ See *infra* section X.D.2.

¹²⁴⁷ See, e.g., AOL comments at 8; Community Colleges comments at 16-17; iSCAN comments at 3-4; Nextel comments at 11-12; PacTel comments at 49-50; U S West comments at 47-48; GI reply comments at 5.

"maximum flexibility" to take service quality into account and to choose the offering or offerings that meets their needs "most effectively and efficiently,"¹²⁴⁸ where this is consistent with other procurement rules under which they are obligated to operate.¹²⁴⁹ We concur with this policy, noting only that price should be the primary factor in selecting a bid. When it specifically addressed this issue in the context of Internet access, the Joint Board only recommended that the Commission require schools and libraries to select the most cost-effective supplier of access.¹²⁵⁰ By way of example, we also note that the federal procurement regulations (which are inapplicable here) specify that in addition to price, federal contract administrators may take into account factors including the following: prior experience, including past performance; personnel qualifications, including technical excellence; management capability, including schedule compliance; and environmental objectives.¹²⁵¹ We find that these factors form a reasonable basis on which to evaluate whether an offering is cost-effective.

482. Other commenters suggest that we go beyond the Joint Board's recommendation and require schools to take other actions. For example, Nextel and WinStar ask us to require schools and libraries to require providers to bid on services on an unbundled basis, because a combination of smaller providers may be able to offer them better prices than those who can offer them the entire package.¹²⁵² Teleport and NCTA ask us to require schools to limit bids to a single round of sealed bids.¹²⁵³ TCI asks that we require vendors to provide their qualifications.¹²⁵⁴ We endorse the objectives that these suggestions seek to achieve; we find, nonetheless, that Commission action is not required because many individual schools and libraries operate under state and local procurement rules designed to achieve those objectives.¹²⁵⁵ Thus, although we do not impose bidding requirements, neither do we exempt eligible schools or libraries from compliance with any state or local procurement rules, such as competitive bidding specifications, with which they must otherwise comply.

483. In response to the concerns of GTE and SBC that existing Commission rules

¹²⁴⁸ See Recommended Decision, 12 FCC Rcd at 321.

¹²⁴⁹ See Recommended Decision, 12 FCC Rcd at 321. Cf. Recommended Decision, 12 FCC Rcd at 323.

¹²⁵⁰ Recommended Decision, 12 FCC Rcd at 323.

¹²⁵¹ See 48 C.F.R. § 15.605(b).

¹²⁵² Nextel comments at 12-13; WinStar comments at 3.

¹²⁵³ NCTA comments at 22; Teleport comments at 9.

¹²⁵⁴ TCI comments at 10.

¹²⁵⁵ See Letter from J. Andrew Magpantay, ALA, to Mark Nadel, Common Carrier Bureau, dated April 25, 1997, at 1-2 and att. 1.

concerning interstate service prevent them from offering rates below their generally available tariffed rates in competitive bidding situations to establish pre-discount rates,¹²⁵⁶ we make the following clarifications. First, our policies on ILEC pricing flexibility apply only to interstate services. The ILECs' abilities to offer intrastate services in competitive bidding situations will be governed by the relevant state public utility commission policies. Second, we find that ILECs will be free under sections 201(b) and 254 to participate in certain competitive bidding opportunities with rates other than those in their generally tariffed offerings. More specifically, they will be free, under section 201(b) of the Act, to offer different rates to consortia that consist solely of governmental entities, eligible health care providers, and schools and libraries eligible for preferential rates under section 254. Thus, we hereby designate communications to organizations, such as schools and libraries and eligible health care providers, eligible for preferential rates under section 254 as a class of communications eligible for different rates, notwithstanding the nondiscrimination requirements of section 202(a). Congress has expressly granted an exemption to section 202(a)'s prohibition against discrimination for these classes of communications.¹²⁵⁷ Thus, ILECs will be free to offer differing, including lower, rates to consortia consisting of section 254-eligible schools and libraries, eligible health care providers, state schools and universities, and state and local governments. These pre-discount rates will be generally available to all eligible members of these classes under tariffs filed with this Commission.¹²⁵⁸ The schools and libraries eligible for discounts under section 254 would then receive the appropriate universal service discount off these rates. Third, ILECs may obtain further freedom to participate in competitive bidding situations as a result of decisions we make in the *Access Charge Reform Proceeding*. In the *Third Report and Order* in the *Access Charge Reform Proceeding*, we will determine whether to permit ILECs to provide targeted offerings in response to competitive bidding situations once certain competitive thresholds are met.¹²⁵⁹ We conclude that this regime, which includes a prohibition against resale of these services, best furthers the explicit congressional directive of providing preferential rates to eligible schools and libraries with a minimum of public interest harm arising from limiting the availability of prediscount rates to these classes.

484. Lowest Price Charged to Similarly Situated Non-Residential Customers for Similar Services. In competitive markets, we anticipate that schools and libraries will be offered

¹²⁵⁶ GTE comments at 97-98; SBC comments at 39-41.

¹²⁵⁷ 47 U.S.C. §§ 254(b)(6), 254(h)(1)(A), and 254(h)(1)(B) (preferential rates for eligible schools, libraries, and health care providers); 47 U.S.C. § 201(b) (special rates for governmental entities). *See also* AT&T Communications Tariff F.C.C. No. 16, Transmittal No. 1876, 5 FCC Rcd 700, 701 (1990) (finding that section 201(b) creates an exception to the general prohibition against discriminatory pricing found in section 202(a), permitting carriers to offer special rates for governmental entities).

¹²⁵⁸ AT&T Communications Tariff F.C.C. No. 16, Transmittal No. 1876, 5 FCC Rcd 700, 701 para. 13 (1990).

¹²⁵⁹ *Access Charge Reform Order* at section I.

competitive, cost-based prices that will match or beat the cost-based prices paid by similarly situated customers for similar services. We concur, however, with the Joint Board that, to ensure that a lack of experience in negotiating in a competitive telecommunications service market does not prevent some schools and libraries from receiving such offers, we should require that a carrier offer services to eligible schools and libraries at prices no higher than the lowest price it charges to similarly situated non-residential customers for similar services (hereinafter "lowest corresponding price").¹²⁶⁰

485. We also adopt the Joint Board's recommendation to use the lowest corresponding price as an upper limit on the price that carriers can charge schools and libraries in non-competitive markets, as well as competitive markets, so that eligible schools and libraries can take advantage of any cost-based rates that other customers may have negotiated with carriers during a period when the market was subject to actual, or even potential, competition.¹²⁶¹ We conclude that requiring providers to charge their lowest corresponding price would impose no unreasonable burden, even on non-dominant carriers,¹²⁶² because all carriers would be able to receive a remunerative price for their services. We clarify that, for the purpose of determining the lowest corresponding price, similar services would include those provided under contract as well as those provided under tariff.

486. Section 254(h)(1)(B) requires telecommunications carriers to make services available to all schools and libraries in any geographic area the carriers serve.¹²⁶³ We share the Joint Board's concern that, if "geographic area" were interpreted to mean the entire state, any firm providing telecommunications services to any school or library in a state would have to be willing to serve any other school or library in the state.¹²⁶⁴ We also agree with the Joint Board that an expansive interpretation of geographic area might discourage new firms beginning to offer service in one portion of a state from doing so due to concern that they would have to serve all other areas in that state.¹²⁶⁵ For example, electric utilities might be discouraged from offering telecommunications services to schools if there were a requirement that once they had offered service to one school or library system in their state of operation, any other school or library in the state could also demand telecommunications services at rates comparable to those the utility offered to its initial "test" community, even if it were not equipped to offer telecommunications

¹²⁶⁰ Recommended Decision, 12 FCC Rcd at 363.

¹²⁶¹ Recommended Decision, 12 FCC Rcd at 364.

¹²⁶² WinStar comments at 12.

¹²⁶³ See 47 U.S.C. § 254(h)(1)(B).

¹²⁶⁴ Recommended Decision, 12 FCC Rcd at 364.

¹²⁶⁵ Recommended Decision, 12 FCC Rcd at 364.

services in those other markets.

487. We concur, therefore, with the Joint Board's recommendation that geographic area (hereinafter referred to as geographic service area) be defined as the area in which a telecommunications carrier is seeking to serve customers with any of its services covered by section 254(h)(1)(B).¹²⁶⁶ We do not limit here the area in which a telecommunications carrier or a subsidiary or affiliate owned or controlled by it can choose to provide service.¹²⁶⁷ We also agree with the Joint Board that telecommunications carriers be required to offer schools and libraries services at their lowest corresponding prices throughout their geographic service areas.¹²⁶⁸ Moreover, we agree with the Joint Board's recommendation that, as a condition of receiving support, carriers be required to certify that the price they offer to schools and libraries is no greater than the lowest corresponding price based on the prices the carrier has previously charged or is currently charging in the market.¹²⁶⁹ This obligation would extend, for example, to competitive LECs, wireless carriers, or cable companies, to the extent that they offer telecommunications for a fee to the public.¹²⁷⁰ We share the Joint Board's conclusion that Congress intended schools and libraries to receive the services they need from the most efficient provider of those services.¹²⁷¹

488. We clarify that a provider of telecommunications services, Internet access, and internal connections need not offer the same lowest corresponding price to different schools and libraries in the same geographic service area if they are not similarly situated and subscribing to a similar set of services.¹²⁷² Providers may not avoid the obligation to offer the lowest corresponding price to schools and libraries for interstate services, however, by arguing that none of their non-residential customers are identically situated to a school or library or that none of their service contracts cover services identical to those sought by a school or library. Rather, we will only permit providers to offer schools and libraries prices above the prices charged to other similarly situated customers when those providers can show that they face demonstrably and significantly higher costs to serve the school or library seeking service. EDLINC asks us to prohibit carriers from distinguishing among customers based on anything other than traffic

¹²⁶⁶ Recommended Decision, 12 FCC Rcd at 364.

¹²⁶⁷ See *infra* section F for a discussion of affiliates.

¹²⁶⁸ Recommended Decision, 12 FCC Rcd at 365.

¹²⁶⁹ Recommended Decision, 12 FCC Rcd at 364.

¹²⁷⁰ Recommended Decision, 12 FCC Rcd at 365.

¹²⁷¹ Recommended Decision, 12 FCC Rcd at 365.

¹²⁷² PacTel comments at 49.

volumes in comparing costs.¹²⁷³ We decline to adopt this approach because we find it reasonable for rates to reflect any factors that clearly and significantly affect the cost of service, including mileage from switching facility and length of contract. We would expect state commissions to employ these same standards when evaluating differences between customers of intrastate services.

489. If the services sought by a school or library include significantly lower traffic volumes or their provision is significantly different from that of another customer with respect to any other factor that the state public service commission has recognized as being a significant cost factor, then the provider will be able to adjust its price above the level charged to the other customer to recover the additional cost incurred so that it is able to recover a compensatory pre-discount price. We also recognize that costs change over time and thus, as PacTel and USTA observe, compensatory rates would not necessarily result if a provider were required to charge the same price it had charged many years ago.¹²⁷⁴ We will establish a rebuttable presumption that rates offered within the previous three years are still compensatory. As Citizens Utilities recognizes, we also would not require a provider to match a price it offered to a customer who is receiving a special regulatory subsidy or that appeared in a contract negotiated under very different conditions, if that would force the provider to offer services at a rate below Total-Service Long-Run Incremental Cost (TSLRIC).¹²⁷⁵

490. We also adopt the Joint Board's recommendation that, if they believe that the lowest corresponding price is unfairly high or low, schools, libraries, and carriers should be permitted to seek recourse from the Commission, regarding interstate rates, and from state commissions, regarding intrastate rates.¹²⁷⁶ Eligible schools and libraries may request a lower rate if they believe the rate offered by the carrier is not the lowest corresponding price. Carriers may request higher rates if they believe that the lowest corresponding price is not compensatory. We find that permitting eligible schools and libraries to seek such recourse permits sufficient flexibility to address U S West's concern that establishing the lowest corresponding price may sometimes be difficult.¹²⁷⁷

491. We reject MCI's proposal that we set the lowest corresponding price based on

¹²⁷³ EDLINC comments at 8-9.

¹²⁷⁴ PacTel comments at 48-49; USTA comments at 37-39.

¹²⁷⁵ Citizens Utilities comments at 17-18.

¹²⁷⁶ Recommended Decision, 12 FCC Rcd at 364.

¹²⁷⁷ U S West comments at 48.

TSLRIC.¹²⁷⁸ We agree with the Joint Board's analysis that using TSLRIC would not be practical, given the limited resources of schools and libraries to participate in lengthy negotiations, arbitration, or litigation.¹²⁷⁹ We also clarify that PacTel is correct that the tariffed rate would represent a carrier's lowest corresponding price in a geographic area in which that carrier has not negotiated rates that differ from the tariffed rate, and that we are not requiring carriers to file new tariffs to reflect the discounts we adopt here for schools and libraries.¹²⁸⁰ EDLINC asserts that tariffed rates in non-competitive markets may treat customers in non-competitive markets unfairly because non-competitive markets are more likely to be the most costly markets to serve.¹²⁸¹ We find, however, that customers in higher cost markets served by large ILECs are likely to benefit already from geographically averaged tariffed rates.

b. Discounts

492. The Act requires the Commission, with respect to interstate services, and the states, with respect to intrastate services, to establish a discount on designated services provided to eligible schools and libraries. Pursuant to section 254(h)(1)(B), the discount must be an amount that is "appropriate and necessary to ensure affordable access to and use of" the services pursuant to section 254(c)(3).¹²⁸² The discount must take into account the principle set forth in section 254(b)(5) and mandated in section 254(d) that the federal universal service support mechanisms must be "specific, predictable, and sufficient."¹²⁸³ We agree with the Joint Board's recommendation that we adopt a percentage discount mechanism, adjusted for schools and libraries that are defined as economically disadvantaged and those schools and libraries located in areas facing particularly high prices for telecommunications service.¹²⁸⁴ In particular, we concur with the Joint Board's recommendation that we adopt discounts from 20 percent to 90 percent for all telecommunications services, Internet access, and internal connections, with the range of discounts correlated to indicators of economic disadvantage and high prices for schools and libraries.¹²⁸⁵

¹²⁷⁸ MCI comments at 17.

¹²⁷⁹ Recommended Decision, 12 FCC Rcd at 365.

¹²⁸⁰ PacTel comments at 50.

¹²⁸¹ EDLINC comments at 9.

¹²⁸² 47 U.S.C. § 254(h)(1)(B).

¹²⁸³ 47 U.S.C. §§ 254(b)(5) and 254(d).

¹²⁸⁴ Recommended Decision, 12 FCC Rcd at 366.

¹²⁸⁵ Recommended Decision, 12 FCC Rcd at 366.

493. We agree with the Joint Board's recommendation that we adopt rules that provide support to eligible schools and libraries through a percentage discount mechanism rather than providing a package of free services or block grants to states because we find that discounts would better assure efficiency and accountability.¹²⁸⁶ Requiring schools and libraries to pay a share of the cost should encourage them to avoid unnecessary and wasteful expenditures because they will be unlikely to commit their own funds for purchases that they cannot use effectively. A percentage discount also encourages schools and libraries to seek the best pre-discount price and to make informed, knowledgeable choices among their options, thereby building in effective fiscal constraints on the discount fund. We find that this approach is consistent with many state and local requirements because such requirements generally require schools and libraries to seek competitive bids for procurements above a specified minimum level.¹²⁸⁷

494. Discounts in High Cost Areas. We also adopt the Joint Board's recommendation that, to make service more affordable to schools and libraries, we offer greater support to those located in high cost areas than to those in low cost areas.¹²⁸⁸ We reject, however, arguments advanced by ALA and EDLINC that the discount matrix recommended by the Joint Board does not adequately acknowledge the substantial disparity between telecommunications prices in different locations.¹²⁸⁹ Although the discount matrix we adopt does not make the prices schools and libraries pay for telecommunications services in high and low cost areas identical, we find that the matrix distributes substantially more funds, particularly on a per-capita basis, to reduce prices paid by schools and libraries in areas with higher telecommunications prices than they do to reduce prices in areas in which such prices are already relatively low. The greater price reduction in terms of total dollar amounts for schools and libraries in high cost areas results primarily because the discount rates are based on percentages that lead proportionally to more funds flowing to those schools and libraries facing proportionally higher prices.¹²⁹⁰

495. This principle can be illustrated using an example provided by EDLINC.¹²⁹¹ In that example, one school in the state of Washington faces undiscounted monthly T-1 charges of

¹²⁸⁶ Recommended Decision, 12 FCC Rcd at 367.

¹²⁸⁷ See Recommended Decision, 12 FCC Rcd at 367.

¹²⁸⁸ Recommended Decision, 12 FCC Rcd at 372.

¹²⁸⁹ ALA comments at 7; EDLINC comments at 16.

¹²⁹⁰ Those in high cost areas that receive higher discount rates than those in low cost areas also will be able to apply those discounts to the cost of internal connections, even though there is no evidence that such costs are likely to be greater in high cost areas than in low cost areas. We find that the combination of these additional factors further ameliorates the concerns of schools and libraries in high cost areas.

¹²⁹¹ EDLINC comments at 16.

\$125.00 per month, while a similar school elsewhere in the state faces undiscounted monthly T-1 charges of \$2100.00 per month. Assuming that both are eligible for a 90 percent discount, the school facing relatively low prices would receive $0.9 \times \$125.00 = \112.50 in support, while the school facing relatively high prices would receive $0.9 \times \$2100.00 = \1890.00 in support. Thus, considering the total dollar amount of support, the school located in the high cost area receives almost 17 times as much support as the school located in the low cost area. In addition, the average number of students in schools in low cost, urban areas exceeds the number in high cost, rural areas.¹²⁹² In fact, the per-capita support figures show that students in high cost rural schools, like the ones in the EDLINC example, would receive 23 times as much support per student as those in the low cost school. Thus, while this high cost school's monthly charges are reduced to \$210.00 per month, compared to the \$12.50 per month paid by the low cost school, the support per student that the high cost school would receive would be 23 times that received by the low cost school.

496. Although the discount mechanism we adopt does not equalize prices in all areas nationwide, it makes telecommunications service in the areas with relatively high prices substantially more affordable to the schools and libraries in those areas. We find that a mechanism that may provide as much as 23 times more support per capita to a school or library in a high cost area than it does to one in a low cost area is providing substantially more of a discount to the former. We also note that some eligible schools and libraries in high cost areas will benefit, at least temporarily, from the high cost assistance that eligible telecommunications carriers serving them will receive. Although high cost support will only be targeted to a limited number of services, none of which are advanced telecommunications and information services,¹²⁹³ many schools and libraries will connect to the Internet via voice-grade access to the PSTN. Furthermore, whereas the Joint Board presumed that such support would only be targeted to residential and single-line businesses,¹²⁹⁴ in the short term, our decision diverges from that result and permits support for multiline businesses.¹²⁹⁵ We agree with the Joint Board that this position on support for schools and libraries in high cost areas is consistent with our other goal of providing adequate support to disadvantaged schools while keeping the size of the total support fund no larger than necessary to achieve this goal.¹²⁹⁶ The Joint Board recommended, and we agree, that the nominal percentage discount levels should be more sensitive to how

¹²⁹² See National Center for Education Statistics, *Digest of Education Statistics 1995* (October 1995) at table 58, p. 70 and table 87, p. 95.

¹²⁹³ See *supra* section VII.

¹²⁹⁴ Recommended Decision, 12 FCC Rcd at 371.

¹²⁹⁵ See *supra* section VII.C.4.

¹²⁹⁶ Recommended Decision, 12 FCC Rcd at 373-374.

disadvantaged a school or library is than whether it is located in a high cost service area.¹²⁹⁷ We conclude, therefore, that the additional support for schools and libraries in high cost areas provided in the matrix we adopt¹²⁹⁸ is "appropriate and necessary to ensure affordable access" to schools and libraries as directed by section 254(h)(1)(B).¹²⁹⁹

497. Discounts for Economically Disadvantaged Schools and Libraries. We adopt the Joint Board's recommendation that we establish substantially greater discounts for the most economically disadvantaged schools and libraries.¹³⁰⁰ We recognize that such discounts are essential if we are to make advanced technologies equally accessible to all schools and libraries. We agree, however, with the Joint Board¹³⁰¹ and several commenters¹³⁰² that not even the most disadvantaged schools or libraries should receive a 100 percent discount. We recognize that even a 90 percent discount -- and thus a 10 percent co-payment requirement -- might create an impossible hurdle for disadvantaged schools and libraries that are unable to allocate any of their own funds toward the purchase of eligible discounted services, and thus could increase the resource disparity among schools.¹³⁰³ We conclude, however, that even if we were to exempt the poorest schools from any co-payment requirement for telecommunications services, a 100 percent discount would not have a dramatically greater impact on access than would a 90 percent discount, because we are not providing discounts on the costs of the additional resources, including computers, software, training, and maintenance, which constitute more than 80 percent of the cost of connecting schools to the information superhighway.¹³⁰⁴ We share the Joint Board's belief that the discount program must be structured to maximize the opportunity for its cost-effective operation, and that, for the reasons noted above, requiring a minimal co-payment by all schools and libraries will help realize that goal.¹³⁰⁵

¹²⁹⁷ Recommended Decision, 12 FCC Rcd at 370 (discussing Joint Board's proposed discount matrix).

¹²⁹⁸ See *infra* section X.C.2.d.

¹²⁹⁹ 47 U.S.C. § 254(h)(1)(B).

¹³⁰⁰ Recommended Decision, 12 FCC Rcd at 367.

¹³⁰¹ Recommended Decision, 12 FCC Rcd at 367. *Contra* NTIA NPRM submission (recommending a 100 percent discount on a particular package of services).

¹³⁰² See, e.g., Ameritech comments at 20; BellSouth comments at 34; Washington UTC comments at 6. *Contra* NTIA NPRM submission (recommending a 100 percent discount on a particular package of services).

¹³⁰³ See, e.g., Ameritech comments at 20; BellSouth comments at 34; Washington UTC comments at 6.

¹³⁰⁴ See *McKinsey Report* at 28.

¹³⁰⁵ Recommended Decision, 12 FCC Rcd at 367.

498. Discount Matrix. The Joint Board considered the approximate size of the fund resulting from a matrix assigning discounts to a school or library based upon its level of economic disadvantage and its location. After substantial deliberation, the Joint Board recommended the following matrix of percentage discounts:

DISCOUNT MATRIX		COST OF SERVICE (estimated % in category)		
		low cost (67%)	mid-cost (27%)	highest cost (5%)
HOW DISADVANTAGED? based on % of students in the national school lunch program (estimated % of US schools in category)	< 1 (3%)	20	20	25
	1-19 (31%)	40	45	50
	20-34 (19%)	50	55	60
	35-49 (15%)	60	65	70
	50-74 (16%)	80	80	80
	75-100 (16%)	90	90	90

499. In fashioning a discount matrix, the Joint Board sought to ensure that the greatest discounts would go to the most economically disadvantaged schools and libraries, with an equitable progression of discounts being applied to the other categories within the parameters of 20 percent to 90 percent discounts.¹³⁰⁶ We find that the proposed matrix, subject to minor modifications, achieves these goals. We will discuss those modifications and the matrix we adopt in more detail below.¹³⁰⁷

500. We further find that the matrix we adopt below satisfies the directive of section 254(h)(1)(B) that we establish a discount that is "appropriate and necessary to ensure affordable access to and use of such services by such entities."¹³⁰⁸ Given that no school or library could afford access without also having the resources to purchase computers and software and train teachers or librarians, we find that no dollar figure or percentage discount can make access "affordable" in any absolute sense. Nor do we interpret section 254(h)(1)(B) as requiring us to

¹³⁰⁶ Recommended Decision, 12 FCC Rcd at 370.

¹³⁰⁷ See *infra* section X.C.2.d.

¹³⁰⁸ 47 U.S.C. § 254(h)(1)(B).

discern such absolute figures or percentages. Rather, we conclude that the Joint Board correctly established its recommended percentages based on a careful balancing of the costs and benefits of providing those levels of support. Accordingly, we reject the suggestion that the Joint Board failed to meet a statutory obligation to demonstrate that these recommended percentages are based on some objective, quantifiable measure of affordability.¹³⁰⁹

c. Identifying High Price Areas

501. Recognizing that schools and libraries in high cost areas¹³¹⁰ will confront relatively higher barriers to connecting to the Internet and maintaining other communications links, the Joint Board proposed a discount matrix that granted schools and libraries located in higher cost areas greater percentage discounts.¹³¹¹ Although its discount matrix used low, mid, and high cost categories based on embedded cost ARMIS data of carriers,¹³¹² the Joint Board did not recommend a way to identify those schools and libraries facing higher costs, except to suggest that we might consider the unseparated loop costs collected under ARMIS.¹³¹³ The Joint Board understood that, because such embedded cost data were already maintained by the Commission, it would be relatively easy to set thresholds that would divide areas into high and low cost based on the cost data of the ILEC serving the area. The Joint Board also recognized that unseparated loop costs were a good proxy for local service prices.

502. The Joint Board suggested that other methods for determining high cost might be appropriate and encouraged the Commission to seek additional comment on the issue,¹³¹⁴

¹³⁰⁹ See ALTS comments at 18.

¹³¹⁰ When it described a "high cost" portion of the support mechanisms for schools and libraries, the Joint Board actually sought to make additional support available to those schools and libraries that would otherwise have to pay relatively higher "prices" for specific telecommunications services. The Joint Board used "cost," however, because the price charged by the service provider would be a cost to the school or library, and the Joint Board also assumed that for a given telecommunications service, the price of that service "is based primarily on the cost [to the carrier of providing] the service in the area." See Recommended Decision, 12 FCC Rcd at 371 (*citing* Senate Working Group NPRM further comments at 2-3).

¹³¹¹ As reflected in the discount matrix in section X.D.3.b *supra*, the discounts provided to the most disadvantaged schools and libraries -- those eligible for 80 or 90 percent discounts -- do not vary based on the level of prices they face.

¹³¹² See Recommended Decision, 12 FCC Rcd at 370.

¹³¹³ Recommended Decision, 12 FCC Rcd at 372. Unseparated costs are the full costs of the loop, including the portions allocated to both the federal and state jurisdictions. See *supra* section VII.C.3. for a discussion of ARMIS data.

¹³¹⁴ Recommended Decision, 12 FCC Rcd at 372.

which we did in the Recommended Decision Public Notice.¹³¹⁵ As a result, we have considered several alternative methods, which were not before the Joint Board at the time of its deliberations. These methods include the use of cost data generated by the forward-looking cost methodologies that proponents have filed for use in determining support for high cost areas;¹³¹⁶ density pricing zones; availability of advanced services;¹³¹⁷ tariffed T-1 prices for connections to an Internet service provider;¹³¹⁸ and whether schools and libraries are located in rural or urban areas.¹³¹⁹ For the reasons discussed below, we conclude that we will classify eligible schools and libraries as high or low cost depending on whether they are located in a rural or an urban area, respectively.

503. Each of the alternatives presented by the commenters for predicting whether schools and libraries will face high prices possesses flaws. For example, while unseparated ARMIS loop costs may often accurately predict local rates outside of high cost areas, they would not reflect whether subscribers must pay toll rates or transport mileage charges to reach an Internet service provider, two factors that significantly influence the actual costs facing schools and libraries seeking connection to the Internet. Density pricing zones¹³²⁰ and two-part classification approaches such as urban/rural¹³²¹ and premium/non-premium rates based on availability of advanced services¹³²² also fail to account for the toll rates and transport mileage charges that high cost subscribers may need to pay to reach an Internet service provider. Using the unseparated loop costs generated by a forward-looking cost methodology suffers from the same deficiencies as the ARMIS cost data and also ignores the averaging of local rates

¹³¹⁵ Recommended Decision Public Notice at 1-2.

¹³¹⁶ See ITC comments at 8; SBC comments at 9; USTA comment at 37.

¹³¹⁷ See, e.g., Brooklyn Public Library comments at 406; New York DOE comments at 4.

¹³¹⁸ See, e.g., PacTel comments at 51.

¹³¹⁹ See, e.g., Colorado LEHTC comments at 2.

¹³²⁰ The Commission allowed geographically deaveraged rate zones, called density pricing zones, for special access and switched transport of DS1 and DS3 services in Expanded Interconnection with Local Telephone Company Facilities and Amendment of the Part 69 Allocation of General Support Facility Costs, *Report and Order and Notice of Proposed Rulemaking*, CC Docket Nos. 91-141 and 92-222, 7 FCC Rcd 7369, 7454-57 (1992) (*Expanded Interconnection Order*); *Second Report and Order and Third Notice of Proposed Rulemaking*, 8 FCC Rcd 7374 (1993). The Commission also required states to establish rate deaveraging for interconnection and unbundled elements over a minimum of three rate zones, stating that "states may, but need not, use the existing density-related rate zones." *Local Competition Order*, 11 FCC Rcd at 15,882-83. The portions of the *Local Competition Order* dealing with interconnection rates have been stayed by court order. See *supra* n.7.

¹³²¹ See, e.g., Colorado LEHTC comments at 2.

¹³²² See Brooklyn Public Library comments at 5, 6; New York DOE comments at 4.

commonly mandated by state regulators. Using the retail price of a T-1 circuit linking a school or library to the nearest point of presence of the most cost-effective Internet service provider has the apparent advantage of being based on the actual prices that schools and libraries pay¹³²³ and reflects all distance-sensitive charges that a school or library would face. We must reject this approach, however, for two reasons. The relative level of T-1 rates may not reflect the relative price for services other than 1.5 Mbps service. More significantly, there is no record in this proceeding regarding what benchmarks of T-1 circuit prices we could use to divide schools and libraries into appropriate cost categories.

504. Given this set of reasonable but imperfect approaches to determining high cost for schools and libraries, we conclude that we should select the classification system that is least burdensome to schools, libraries, and carriers. We will therefore identify high cost schools and libraries as those located in rural, as opposed to urban, areas. After careful consideration, we conclude that identifying whether a school or library is located in a rural or urban area is a relatively easy method for schools and libraries to use, reasonably matches institutions facing the highest prices for telecommunications services with the highest discounts, and imposes no burden on carriers. Adoption of this approach is also consistent with the Joint Board's intention that the method selected for determining high cost should calibrate the cost of service in a "reasonable, practical, and minimally burdensome manner."¹³²⁴ We also conclude that, for purposes of the schools and libraries discount program, rural areas should be defined in accordance with the definition adopted by the Department of Health and Human Services' Office of Rural Health Policy (ORHP/HHS). ORHP/HHS uses the Office of Management and Budget's (OMB) Metropolitan Statistical Area (MSA) designation of metropolitan and non-metropolitan counties (or county equivalents), adjusted by the most currently available Goldsmith Modification, which identifies rural areas within large metropolitan counties.¹³²⁵

505. Adoption of this definition of rural areas is consistent with the approach adopted in the health care section of this Order¹³²⁶ and represents a simple approach for schools and libraries to determine eligibility for an incremental high cost discount. OMB's list of metropolitan counties and the list of additional rural areas within those counties identified by the Goldsmith Modification are readily available to the public. Eligible schools and libraries will need only to consult those lists to determine whether they are located in rural areas for purposes of the universal service discount program. In addition to being simple to administer, basing the high cost discount on a school's or library's location in a rural area is a reasonable approach for

¹³²³ Governor of Guam comments at 11-12; PacTel comments at 51.

¹³²⁴ Recommended Decision, 12 FCC Rcd at 372.

¹³²⁵ See *infra* section XI, which contains a detailed discussion of OMB's designation of metropolitan and non-metropolitan counties and the Goldsmith Modification in the context of health care.

¹³²⁶ See *infra* section XI.

determining which entities should receive the high cost discount. The distance between customers and central offices, and the lower volumes of traffic served by central offices in rural areas, combine to create less affordable telecommunications rates.¹³²⁷

506. We conclude that all of the alternatives would likely be more administratively burdensome for schools, libraries, and carriers than using the urban/rural distinction. For example, ARMIS data is adjusted every year, which might lead to frequent changes in a school's or library's eligibility for a high cost discount, forcing those institutions that might otherwise be near the cutoff points to review the cost data every year and likely generating many calls to the carriers. In addition, this approach could create uncertainty for those institutions inclined to consider multi-year expenditures. While the definitions of urban and rural areas might also change, these classifications are not adjusted annually and it is likely that schools or libraries would already be aware of the changes in their areas leading to their reclassification from urban to rural (or rural to urban). Density pricing zones do not exist in all areas, and in areas where they do exist, the zones could change at irregular intervals, and it is not clear how one would recognize the "premium" rates which Brooklyn Public Library suggests should form the basis of the greater discount afforded to schools and libraries located in high cost areas.¹³²⁸ The use of forward-looking cost models, meanwhile, is not practical here because the data will not be readily accessible to schools and libraries. Finally, the record does not include the data to enable us to select the T-1 prices to divide schools and libraries into categories of those facing high, mid, or low T-1 prices, nor does it support the use of the price of a 1.5 Mbps channel as a surrogate for all services schools and libraries may select. In any event, schools and libraries may choose to purchase services other than T-1.

507. Because we adopt the use of categories of rural and urban to determine a school's or library's eligibility for a high cost discount, we conclude that there should be only two categories of schools and libraries. Because schools and libraries will be categorized as either rural (high cost) or urban (low cost), the "mid-cost" category recommended by the Joint Board is no longer relevant. We find that a matrix of two columns is also somewhat simpler to use and thus, we modify the discount matrix recommended by the Joint Board to have two columns (i.e., "urban" and "rural") as opposed to three.

¹³²⁷ See Colorado LEHTC comments at 1.

¹³²⁸ See Brooklyn Public Library comments at 4-6. Brooklyn Public Library proposes a two-part formula for determining the high cost discount. First, Brooklyn Public Library recommends calculating local baseline rates for all services. In areas in which certain advanced services, such as frame relay, are not available and the subscriber pays a "premium" rate for these advanced services, that "premium" rate should be discounted to the local baseline rate. Second, Brooklyn Public Library recommends that the adjusted baseline rate be compared against a national average of local baseline rates to calculate an additional discount. These two discounts would comprise the high cost discount. *Id.*

d. Identifying Economically Disadvantaged Schools and Libraries

508. Schools. We agree with the Joint Board's recommendation that we measure a school's level of poverty in a manner that is minimally burdensome, ideally using data that most schools already collect.¹³²⁹ Although the Joint Board concluded that the national school lunch program meets this standard, it suggested that the Commission also consider other approaches that would be both minimally burdensome for schools and accurate measures of poverty.¹³³⁰

509. Based on our review of the comments filed in response to the Recommended Decision Public Notice, we agree with the Joint Board that using eligibility for the national school lunch program to determine eligibility for a greater discount accurately fulfills the statutory requirement to ensure affordable access to and use of telecommunications and other supported services for schools.¹³³¹ As noted by commenters, the national school lunch program determines students' eligibility for free or reduced-price lunches based on family income, which is a more accurate measure of a school's level of need than a model that considers general community income.¹³³² In addition, the national school lunch program has a well-defined set of eligibility criteria, is in place nationwide, and has data-gathering requirements that are familiar to most schools. We agree with USTA¹³³³ that use of an existing and readily available model, such as the national school lunch program, will be both relatively simple and inexpensive to administer.

510. We conclude that a school may use either an actual count of students eligible for the national school lunch program or federally-approved alternative mechanisms¹³³⁴ to determine the level of poverty for purposes of the universal service discount program. Alternative mechanisms may prove useful for schools that do not participate in the national school lunch

¹³²⁹ Recommended Decision, 12 FCC Rcd at 374.

¹³³⁰ Recommended Decision, 12 FCC Rcd at 374.

¹³³¹ Recommended Decision, 12 FCC Rcd at 375.

¹³³² AFT comments at 3; Washington UTC comments at 7.

¹³³³ USTA comments at 36.

¹³³⁴ See 34 C.F.R. § 200.28(a)(2)(i)(B) . Under this regulation, enacted pursuant to Title I of the Improving America's Schools Act of 1994, private schools that do not have access to the same poverty data that public schools use to count children from low-income families may use comparable data "(1) [c]ollected through alternative means such as a survey" or "(2) [f]rom existing sources such as AFDC or tuition scholarship programs." 34 C.F.R. § 200.28(a)(2)(i)(B)(1) and (2). We note, however, that AFDC will be altered significantly by the recently-enacted welfare reform law. See The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, P.L. 104-193. See *supra* section VIII for a discussion of other means-tested qualification standards.

program or schools that participate in the lunch program but experience a problem with undercounting eligible students (e.g., high schools, rural schools, and urban schools with highly transient populations).¹³³⁵ Schools that choose not to use an actual count of students eligible for the national school lunch program may use only the federally-approved alternative mechanisms contained in Title I of the Improving America's Schools Act, which equate one measure of poverty with another.¹³³⁶ These alternative mechanisms permit schools to choose from among existing sources of poverty data a surrogate for determining the number of students who would be eligible for the national school lunch program. A school relying upon one of these alternative mechanisms could, for example, conduct a survey of the income levels of its students' families. We conclude that only federally-approved alternative mechanisms, which rely upon actual counts of low-income children, provide more accurate measures of poverty and less risk of overcounting, than other methods suggested by some commenters that merely approximate the percentage of low-income children in a particular area.¹³³⁷ Although the undercounting problem experienced by some schools in their use of the national school lunch program was raised by commenters after the Recommended Decision and is, therefore, an issue that the Joint Board did not consider, we conclude that our determination to permit the use of federally-approved alternative mechanisms is consistent with the Joint Board's recommendation that the method for measuring economic disadvantage be minimally burdensome and use data that schools already collect.¹³³⁸ We also note that federally-approved alternative mechanisms have been endorsed in existing regulations,¹³³⁹ have been the product of a negotiated rulemaking in which schools participated, and are in use already by some schools.¹³⁴⁰

511. We, therefore, adopt neither GTE's suggestion that we use U.S. Census Bureau data¹³⁴¹ nor CEDR's proposal that we consider the value of owner-occupied housing or median household income and population density¹³⁴² to determine a school's level of poverty because

¹³³⁵ See, e.g., AFT comments at 3 (stating that "some high schools, rural schools, [and] urban schools with highly transient populations" experience undersubscription to the national school lunch program, resulting in an inaccurate count of eligible students); EDLINC comments at 12 (stating that "high school students have been historically undercounted and there may also be undercounting of transient populations").

¹³³⁶ See 34 C.F.R. § 200.28(a)(2)(i)(B)(1) and (2).

¹³³⁷ See Great City Schools comments at 4.

¹³³⁸ Recommended Decision, 12 FCC Rcd at 374.

¹³³⁹ 34 C.F.R. § 200.28(a)(2)(i)(B).

¹³⁴⁰ AFT comments at 4.

¹³⁴¹ See GTE comments at 106-107.

¹³⁴² See CEDR comments at 15.

these methods may burden many schools with the task of collecting additional data. We also find that such methods, to the extent that they measure the wealth of a school's surrounding area rather than the wealth of a school's students, are less accurate than the federally-approved alternative mechanisms. Thus, a school located in an economically disadvantaged community that does not draw its students from that community, such as a magnet, private, or parochial school, might receive a greater discount than other schools serving a similar student population.

512. Libraries. The Joint Board recommended that, in the absence of a better proposal, a library's degree of poverty should be measured based on how disadvantaged the schools are in the school district in which the library is located. Under this plan, a library would receive a level of discount representing the average discount, based on both public and non-public schools, offered to the schools in the school district in which it is located. Finding that this was "a reasonable method of calculation because libraries are likely to draw patrons from an entire school district and this method does not impose an unnecessary administrative burden on libraries," the Joint Board recommended that the Commission seek additional comment on this and other measures of poverty that would be minimally burdensome for libraries.¹³⁴³

513. Based on our review of the comments received in response to the Recommended Decision, we adopt the Joint Board's recommendation and conclude that a library's level of poverty be calculated on the basis of school lunch eligibility in the school district in which the library is located, with one modification. We conclude that it would be less administratively burdensome and, therefore, would impose lower administrative costs, to base a library's level of poverty on the percentage of students eligible for the national school lunch program only in the public school district in which the library is located. To require the administrator to average the discounts applicable to both public and non-public schools would impose an unnecessary administrative burden without an offsetting benefit to libraries.

514. We agree with commenters that library service areas and school districts often are not identical, and that libraries may not have ready access to information that would allow them to coordinate their service areas with the applicable school district lunch data.¹³⁴⁴ We are not, however, requiring libraries to coordinate their service areas with school districts. The procurement officer responsible for ordering telecommunications and other supported services for a library or library system need only obtain from the school district's administrative office the percentage of students eligible for the national school lunch program in the district in which the library is located. We conclude, therefore, that adopting this approach will not impose an unnecessary administrative burden on libraries.

¹³⁴³ Recommended Decision, 12 FCC Rcd at 376.

¹³⁴⁴ See, e.g., ALA comments at 4; Colorado LEHTC comments at 2; NCLIS comments at 10; Washington Library comments at 3.

515. ALA notes that residents of towns that do not have schools generally must send their children to other towns to attend school.¹³⁴⁵ We find that the discount for a library in such a circumstance would be based on an average of the percentage of students eligible for the school lunch program in each of the school districts in which the town's children attend school.

516. Moreover, ALA recommends using the poverty rate, based on U.S. Census Bureau data, of families in a library's service area to determine that library's level of poverty. Specifically, ALA proposes an alternate discount matrix in which libraries' levels of poverty are calculated based on the percentage of families at or below the poverty line within a one-mile¹³⁴⁶ or two-mile radius¹³⁴⁷ of a library branch or facility. ALA argues that using residential poverty data, which is based on U.S. Census Bureau data, reflects more accurately the level of poverty in a library's service area.¹³⁴⁸ Colorado Department of Education likewise asserts that the one-mile radius should provide a standard basis for calculating the poverty level for all libraries.¹³⁴⁹ We conclude, however, that there is not sufficient evidence in the record to support claims that the poverty level within either a one- or two-mile radius of a library branch or facility accurately reflects the poverty level throughout a library's entire service area. We also decline to adopt the approach initially presented by ALA in their comments, referred to as the "LSTA poverty factor," which would require libraries to calculate the percentage of families at or below the poverty line throughout their service areas.¹³⁵⁰ We conclude that because the record does not demonstrate that libraries routinely collect such data, imposing such a requirement would be administratively burdensome for most libraries.

517. We also conclude that using school lunch eligibility to calculate the poverty level of both schools and libraries addresses Colorado Department of Education's concern that equity

¹³⁴⁵ Dummer, New Hampshire, for example, has a public library but sends its children to school in Milan Village for grades one through six and in Berlin for grades seven through twelve. Letter from Carol Henderson, ALA, to Irene Flannery, Common Carrier Bureau, dated March 27, 1997 at 1 (ALA March 27 *ex parte*).

¹³⁴⁶ See ALA reply comments at 5; Letter from Carol C. Henderson, ALA, to Mark Nadel, Common Carrier Bureau, dated March 17, 1997 at Att. 2 (ALA March 17 *ex parte*). See also Letter from Nancy Bolt, Colorado Department of Education, to Mark Nadel, Common Carrier Bureau, dated March 27, 1997 at 2 (Colorado Department of Education March 27 *ex parte*).

¹³⁴⁷ Letter from Andrew Magpantay, ALA, to Irene Flannery, Common Carrier Bureau, dated May 1, 1997 at 2-3 (ALA May 1 *ex parte*).

¹³⁴⁸ ALA May 1 *ex parte* at 1.

¹³⁴⁹ Letter from Nancy Bolt, Colorado Department of Education, to Mark Nadel, Common Carrier Bureau, dated March 28, 1997 at 2 (Colorado Department of Education March 28 *ex parte*).

¹³⁵⁰ See ALA comments at 8-10.

exist between schools and libraries.¹³⁵¹ That is, because school lunch eligibility data measures the percentage of students within 185 percent of the poverty line, the program that we adopt herein will ensure that both schools and libraries are afforded discounts based on the same measure of poverty. Under ALA's proposal, however, libraries would have received discounts based on the percentage of families at or below the poverty line, while schools would have received discounts based on the percentage of students within 185 percent of the poverty line. We conclude, therefore, that libraries will not be disadvantaged by adoption of the Joint Board's recommendation to use school lunch eligibility to determine the level of poverty for both schools and libraries. We also conclude that using the same measure of poverty for both schools and libraries will lower the administrative costs associated with the discount program described herein.

518. In addition, we do not adopt Seattle's suggestion that libraries be required to aggregate discounts from the three closest public schools,¹³⁵² nor do we adopt the recommendations of Pennsylvania Library Ass'n and Mississippi that we use per-capita market value of the local real estate market or per capita income levels in each community to determine a library's level of poverty.¹³⁵³ We conclude that these approaches would impose a greater administrative burden on libraries than would requiring them to obtain the school district's school lunch eligibility data insofar as data pertaining to local market values or income levels may be less accessible to libraries than school lunch eligibility data obtained from a local school district's administrative office. For these reasons, we conclude that relying on school lunch eligibility data will provide an accurate measure of economic disadvantage and will impose a minimal administrative burden on libraries.

519. Levels of Poverty. We agree with the Joint Board's recommendation that we adopt a step function to define the level of discount available to schools and libraries, based on the level of poverty in the areas they serve.¹³⁵⁴ A step function will define multiple levels of discount based on the percentage of students eligible for the national school lunch program. We also agree with the Joint Board's recommendation that the number of steps for determining discounts applied to telecommunications and other supported services should be based principally on the existing Department of Education categorization of schools eligible for the national school lunch program.¹³⁵⁵ We conclude that this approach is reasonable because the national school lunch program is based on family income levels. CNMI proposes that the matrix

¹³⁵¹ Colorado Department of Education March 28 *ex parte* at 2.

¹³⁵² Seattle comments at 3.

¹³⁵³ Mississippi comments at 5; Pennsylvania Library Ass'n comments at 1.

¹³⁵⁴ Recommended Decision, 12 FCC Rcd at 376.

¹³⁵⁵ Recommended Decision, 12 FCC Rcd at 376.

reflect additional considerations, such as per-capita income,¹³⁵⁶ but does not elaborate on how such a matrix would be constructed. Because CNMI's suggested approach would require schools and libraries to collect additional data with which they are not likely to be familiar and it is not clear that use of such data would further the goals of the Act, we conclude that including factors other than level of poverty and location in a high cost area in the discount matrix would be unreasonably burdensome.

520. For purposes of administering the school lunch program, the Department of Education places schools in five categories, based on the percentage of students eligible for free or reduced-price lunches: 0-19 percent; 20-34 percent; 35-49 percent; 50-74 percent; and 75-100 percent.¹³⁵⁷ Consistent with the Joint Board's recommendation, we adopt the percentage categories used by the Department of Education for schools and libraries, and we also establish a separate category for the least economically disadvantaged schools and libraries, i.e., those with less than one percent of their students eligible for the national school lunch program.¹³⁵⁸ Schools and libraries in the "less than one percent" category should have comparatively greater resources within their existing budgets to secure affordable access to services even with lower discounted rates. We, therefore, adopt the following matrix for schools and libraries:

¹³⁵⁶ CNMI comments at 15-17.

¹³⁵⁷ See National Data Research Center (1995), *Schools and Staffing Surveys, 1993-94* (unpublished tabulations commissioned by the U.S. Department of Education for the National Assessment of Title I).

¹³⁵⁸ Recommended Decision, 12 FCC Rcd at 376.

SCHOOLS AND LIBRARIES DISCOUNT MATRIX		DISCOUNT LEVEL	
HOW DISADVANTAGED?		urban discount (%)	rural discount (%)
% of students eligible for national school lunch program ¹³⁵⁹	(estimated % of US schools in category)		
< 1	3	20	25
1-19	31	40	50
20-34	19	50	60
35-49	15	60	70
50-74	16	80	80
75-100	16	90	90

521. We conclude that this approach fulfills our obligation to ensure that telecommunications and other supported services are provided to schools and libraries at "rates less than the amounts charged for similar services to other parties."¹³⁶⁰ We also conclude that the step function used to define the entries in the discount matrix addresses CSE's concern that we provide greater levels of support to schools and libraries that have the greatest need.¹³⁶¹

522. Self-Certification Requirements. We agree with the Joint Board's recommendation that, when ordering telecommunications and other supported services, the procurement officer responsible for ordering such services for a school or library must certify its degree of poverty to the universal service administrator. For eligible schools ordering telecommunications and other supported services at the individual school level, which we anticipate will be primarily non-public schools, the procurement officer ordering such services must certify to the universal service administrator the percentage of students eligible in that

¹³⁵⁹ Based on 1993 National Data Research Center data.

¹³⁶⁰ 47 U.S.C. § 254(h)(1)(B).

¹³⁶¹ CSE comments at 12.

school for the national school lunch program.¹³⁶² For eligible libraries ordering telecommunications and other supported services at the individual library level, which we anticipate will be primarily single-branch libraries, the procurement officer ordering such services must certify to the universal service administrator the percentage of students eligible for the national school lunch program in the school district in which the library is located.

523. For eligible schools ordering telecommunications and other supported services at the school district or state level, we agree with the Joint Board's recommendation that we minimize the administrative burden on schools while at the same time ensuring that the individual schools with the highest percentages of economically disadvantaged students receive the deepest discounts for which they are eligible.¹³⁶³ We, therefore, adopt the Joint Board's recommendation to require the procurement officer for each school district or state applicant to certify to the universal service administrator the percentage of students in each of its schools that is eligible for the national school lunch program,¹³⁶⁴ calculated either through an actual count of eligible students or through the use of a federally-approved alternative mechanism, as discussed above.¹³⁶⁵ If the level of discount were instead calculated for the entire school district, a school serving a large percentage of students eligible for the national school lunch program that was located in a school district comprised primarily of more affluent schools would not benefit from the level of discount to which it would be entitled if discounts had been calculated on an individual school basis. The school district or state may decide to compute the discounts on an individual school basis or it may decide to compute an average discount; in either case, the state or the district shall strive to ensure that each school receives the full benefit of the discount to which it is entitled.

524. For libraries ordering telecommunications and other supported services at the library system level, we agree with commenters asserting that library systems should be able to compute discounts on either an individual branch basis or based on an average of all branches within the system.¹³⁶⁶ Specifically, if individual branches within a library system are located in different school districts, we conclude that the procurement officer responsible for ordering

¹³⁶² As discussed *supra* in section X.C.2.d, a school may opt to use either an actual count of students participating in the national school lunch program or a federally-approved alternative mechanism designed to calculate the percentage of students eligible for the national school lunch program to determine its level of economic disadvantage for purposes of universal service support.

¹³⁶³ Recommended Decision, 12 FCC Rcd at 375.

¹³⁶⁴ Recommended Decision, 12 FCC Rcd at 375.

¹³⁶⁵ See *infra* section X.D.2.

¹³⁶⁶ See, e.g., ALA comments at 9; Brooklyn Public Library comments at 8; Washington Library comments at 5.

telecommunications and other supported services for the library system must certify to the administrator the percentage of students eligible for the national school lunch program in each of the school districts in which its branches are located. This requirement is consistent with the treatment of school districts, as discussed above, and encourages library systems to strive to ensure that a branch located within a less affluent area of an otherwise more affluent library system will receive the greater discounts targeted to economically disadvantaged institutions. The library system may decide to compute the discounts on an individual branch library basis or it may decide to compute an average discount; in either case, the library system shall strive to ensure that each library receives the full benefit of the discount to which it is entitled.

525. Similarly, for library consortia ordering telecommunications and other supported services, we conclude that each consortium's procurement officer must certify to the administrator the percentage of students eligible for the national school lunch program for the school district in which each of its members is located. Each library consortium may compute the discounts on the basis of the school district in which each consortium member is located or it may compute an average discount; in either case, each library consortium shall strive to ensure that each of its members receives the full benefit of the discount to which it is independently entitled.

526. Additional Considerations. We do not adopt several other proposals related to measuring economic disadvantage. We decline to adopt EDLINC's proposal that we establish a "hardship appeals process" for a school or library in great need that does not, according to the estimation of that school or library, receive an adequate discount.¹³⁶⁷ We agree with AFT that our priority must be to establish the basic schools and libraries discount program. Whether a hardship appeals process as described by EDLINC is necessary can be addressed when the Joint Board reviews the discount program in 2001 or sooner, if necessary. In the interim, we are satisfied that the discount program that we adopt, reaching as high as 90 percent for the most disadvantaged schools and libraries, will provide sufficient support. We also do not adopt Ohio DOE's suggestion that we establish a trust fund for disadvantaged schools and libraries to ensure that sufficient funds are available when such entities are ready to participate in the universal service discount program.¹³⁶⁸ We conclude that such a fund is not necessary because eligible schools and libraries that are not ready to participate in the discount program in the first year simply may participate in subsequent years. As discussed above, the cap applies on an annual basis, and funds are not committed beyond the present funding year. Moreover, any funds not used in a particular year will be carried forward to the next year and will be added to the \$2.25 billion annual cap, if demand exists.

527. Although Delaware PSC's contention that Delaware will be a "net loser" under the

¹³⁶⁷ EDLINC comments at 15.

¹³⁶⁸ Ohio DOE comments at 6.

schools and libraries discount structure because it is likely to contribute more money than it will receive may be correct,¹³⁶⁹ the Joint Board urged us to provide greater discounts to economically disadvantaged schools and libraries. The record in this proceeding also supports such discounts.¹³⁷⁰ Moreover, the "net loser" argument is not compelling because the universal service discount program is tailored to provide support to eligible schools and libraries, not states. Because we must ensure that telecommunications and other supported services are provided to schools and libraries at "rates less than the amounts charged for similar services to other parties,"¹³⁷¹ we also do not adopt Cincinnati Bell's proposal that the calculation of discounts for schools and libraries be left to the states.¹³⁷² We note that states are free to establish their own discount programs under state-funded programs, but such programs will not receive federal universal service support.¹³⁷³

528. Finally, we adopt Ameritech's suggestion that information about the universal service discounts for which individual schools and libraries are eligible, based on their level of poverty and rural status, be posted on the same website as that on which schools' and libraries' RFPs will be posted, as discussed below.¹³⁷⁴ We conclude that posting this information on the website created by the universal service administrator for the schools and libraries discount program may assist providers seeking to provide eligible services to a school or library by providing potentially useful information about a prospective customer. If a school district submits school lunch eligibility information for each school, or a library system submits school lunch eligibility information for each branch, then the universal service administrator is instructed to post that information. If a school district chooses to submit only district-wide poverty information or a library system chooses to provide only system-wide poverty information, then that is the information that will be posted by the universal service administrator. We also adopt Ameritech's suggestion that the actual discounts be calculated and posted on the website, as discussed below.¹³⁷⁵

¹³⁶⁹ Delaware PSC comments at 1-2, 4-6.

¹³⁷⁰ See, e.g., ALA comments at 2; Alliance for Community Media comments at 10; EDLINC comments at 3; Illinois State Library comments at 1; Mississippi comments at 5; Owen J. Roberts School District comments at 1; PacTel comments at 51-52; Teleport comments at 9; Urban League comments at 3-4; Universal Service Alliance comments at 9; USTA comments at 36; Washington Library comments at 2; Atlanta Board of Education reply comments at 1; Fort Frye School District reply comments at 1.

¹³⁷¹ 47 U.S.C. § 254(h)(1)(B).

¹³⁷² Cincinnati Bell comments at 16.

¹³⁷³ See *infra* section X.C.2.f.

¹³⁷⁴ See *infra* section X.D.2.

¹³⁷⁵ See *infra* section X.D.2.

e. **Cap and Trigger**

(1) **Cap Level**

529. We adopt the Joint Board's recommendation that there be an annual cap of \$2.25 billion on universal service support for schools and libraries at this time.¹³⁷⁶ We also adopt the Joint Board's determination that, if the annual cap is not reached due to limited demand from eligible schools and libraries, the unspent funds will be available to support discounts for schools and libraries in subsequent years.¹³⁷⁷ We modify the Joint Board's recommendation slightly, however, to limit collection and spending for the period through June 1998, in light of both the need to implement the necessary administrative processes and the need to make the fund sufficiently flexible to respond to demand. Thus, for the funding period beginning January 1, 1998 and ending June 1998, the administrator will only collect as much as required by demand, but in no case more than \$1 billion. Furthermore, if less than \$2.25 billion is spent in calendar year 1998, then no more than half of the unused portion of the funding authority for calendar year 1998 shall be spent in calendar year 1999. Similarly, if the amount allocated in calendar years 1998 and 1999 is not spent, no more than half of the unused portion of the funding authority for these two years shall be spent in calendar year 2000.

530. We note that, unlike Commission programs for high cost and low-income assistance,¹³⁷⁸ which are based on existing programs with historical data for estimating how much support these programs may require, there is no existing program to help us estimate the cost of funding the support program we adopt under the Snowe-Rockefeller-Exon-Kerrey amendment. While the *McKinsey Report*,¹³⁷⁹ the *KickStart Initiative*,¹³⁸⁰ and other data sources¹³⁸¹ attempt to estimate the cost of providing support to schools and libraries, the utility of these reports is limited insofar as they attempt to estimate costs in an area where technologies are developing rapidly and demand is inherently difficult to predict. Therefore, to fulfill our statutory obligation to create a specific, predictable, and sufficient universal service support mechanism, we adopt the Joint Board's recommendation to establish an annual cap on the

¹³⁷⁶ Recommended Decision, 12 FCC Rcd at 370.

¹³⁷⁷ Recommended Decision, 12 FCC Rcd at 370.

¹³⁷⁸ See *supra* sections VII (high cost) and VIII (low-income).

¹³⁷⁹ See generally *McKinsey Report*.

¹³⁸⁰ *KickStart Initiative: Connecting America's Communities to the Information Superhighway* (1996) (*KickStart Initiative*).

¹³⁸¹ See, e.g., *Rothstein Thesis*; NCLIS, *Internet Cost and Cost Models for Public Libraries, Final Report* (June 1995) (*NCLIS Report*).

amount of funds available to schools and libraries.¹³⁸²

531. Extrapolating from the data provided by McKinsey,¹³⁸³ Rothstein,¹³⁸⁴ and NCLIS,¹³⁸⁵ the Joint Board estimated that the total cost of the telecommunications services eligible for discounts, as discussed above, would be approximately \$3.1 to \$3.4 billion annually during an initial four-year deployment period and approximately \$2.4 to \$2.7 billion annually during subsequent years.¹³⁸⁶

532. We lack sufficient historical data to estimate accurately demand for the first year of this program. In the past when the Commission has established similar funding mechanisms, the Commission or the administrator has had access to information upon which to base an estimate of necessary first-year contribution levels. For example, when the existing high cost support mechanism was established, carriers were required to provide, in advance, the data necessary to estimate support amounts so that first-year collection levels could be set.¹³⁸⁷ When the TRS fund was established, NECA was able to provide a rough estimate of usage levels because TRS was an existing service, albeit funded differently.¹³⁸⁸ In contrast, no unified

¹³⁸² Recommended Decision, 12 FCC Rcd at 368.

¹³⁸³ See generally *McKinsey Report*.

¹³⁸⁴ See generally *Rothstein Thesis*.

¹³⁸⁵ See generally *NCLIS Report*.

¹³⁸⁶ Recommended Decision, 12 FCC Rcd at 369. The Joint Board reached these estimates based on the following assumptions and adjustments. First, the Joint Board adjusted the McKinsey base cost estimates for the full classroom model to account for discounts that McKinsey estimates: 20 percent to 30 percent volume discounts and a 10 percent discount from using volunteers to pull cable. The Joint Board also adjusted McKinsey figures downward to reflect the increased percentage of schools that have already installed internal connections since the McKinsey Report was prepared. The Joint Board increased the McKinsey figures to reflect the coverage of approximately 113,000 public and non-public schools, because McKinsey's estimates were based on only 84,500 public schools. The Joint Board also added the cost of Internet access, assuming that 75 percent of schools and libraries will take at least basic access in the first year of this program, and that all schools and libraries will use at least basic access in subsequent years. Furthermore, the Joint Board's estimates were based on deployment of internal connections and T-1 connections in approximately one quarter of all eligible schools and libraries in each of the initial four years. Finally, the Joint Board estimated the telecommunications-related costs of schools that have not yet fully deployed internal connections or more advanced access based on an estimate that basic usage by schools is approximately \$525 million annually today. Recommended Decision, 12 FCC Rcd at 369.

¹³⁸⁷ See Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board, *Decision and Order*, CC Docket No. 80-286, 96 FCC 2d 781 (1984) at para. 39.

¹³⁸⁸ See Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, *Report and Order and Request for Comments*, 6 FCC Rcd 4657, 4657 (1991); *Third Report and Order*, 8 FCC Rcd 5300, 5303-04 (1993).

mechanisms exist to provide telecommunications and information services to the nation's classrooms and libraries. Therefore, we direct the administrator to collect \$100 million per month for the first three months of 1998 and to adjust future contribution assessments quarterly based on its evaluation of school and library demand for funds, within the limits of the spending caps we establish here. We agree with AT&T, Bell Atlantic, and NYNEX, that this collection mechanism will "[e]nsure that the funds will be available as needed while avoiding the potential problems arising from the accumulation of large amounts of funds in a federal universal service fund."¹³⁸⁹ We direct the administrator to report to the Commission on a quarterly basis, on both the total amount of payments made to entities providing services and facilities to schools and libraries, to finance universal service support discounts, and its determination regarding contribution assessments for the next quarter.¹³⁹⁰

533. We note that some commenters charge that the cap the Joint Board recommended is too high¹³⁹¹ and others assert that it is too low.¹³⁹² We find that the Joint Board carefully weighed the benefits of higher discounts to eligible schools and libraries, which would lead advanced telecommunications services to become more affordable to schools and libraries, against the cost of greater discounts, which would create the need for larger support mechanisms. After substantial deliberations, the Joint Board struck a reasonable balance by recommending a program that would call for contributions of no more than \$2.25 billion annually. No commenter has presented record evidence indicating that the recommended discounts produce prices that are not affordable, and none has suggested a more persuasive method for setting affordable prices.

534. We reject Ameritech's proposal for replacing the cap proposed by the Joint Board with two caps, one applied to funding for internal connections and one for recurring services.¹³⁹³ While Ameritech is likely correct that the demand for internal connections will decline as schools deploy internal connections, we find that we can re-examine this issue in the comprehensive universal service review in 2001. At that point, if funds needed to finance residual deployment are significantly reduced, the cap should be lowered. Implicit in any decision to have two caps is the decision to have two distinct support mechanisms. If we were to establish separate support mechanisms for internal connections and for telecommunications

¹³⁸⁹ Letter from Edward D. Young, Bell Atlantic, and Frank J. Gumper, NYNEX, to Chairman Reed E. Hundt, FCC, May 1, 1997.

¹³⁹⁰ Quarterly reports shall be filed with the Commission within 30 days after the end of each quarter.

¹³⁹¹ See, e.g., LCI comments at 11; AirTouch reply comments at 11.

¹³⁹² See, e.g., Alliance for Community Media comments at 11; CEDR comments at 16; Washington SPI comments at 1.

¹³⁹³ Ameritech reply comments at 5.

services and access to information services, schools and libraries would need to allocate costs between the two components. This need to allocate costs would particularly burden those eligible schools and libraries using wireless service for internal connections, telecommunications services, and access to information services because they would have to characterize every transmission they made as internal, external, or both. Given the likely popularity of wireless services,¹³⁹⁴ this allocation requirement is not likely to be a minor problem. In addition, such an allocation requirement would not be competitively neutral and thus would violate the overall principle of competitive neutrality adopted for purposes of section 254. Moreover, such a requirement would create an artificial constraint on schools' and libraries' discretion to use technologies that fit their needs and their budgets. Thus, Ameritech's proposal would impose significant costs without sufficient evidence that it would yield any significant benefit.

(2) Operation of Cap and Trigger

535. Timing of Funding Requests. As discussed above, we adopt the Joint Board's recommendation that universal service spending for eligible schools and libraries be capped at \$2.25 billion annually.¹³⁹⁵ We also adopt the Joint Board's recommendation that such support be committed on a first-come-first-served basis. We further conclude that the funding year will be the calendar year and that requests for support will be accepted beginning on the first of July for the following year. For the first year only, requests for support will be accepted as soon as the schools and libraries website is open and the applications are available. Eligible schools and libraries will be permitted to submit funding requests once they have made agreements for specific eligible services,¹³⁹⁶ and, as the Joint Board recommended, the administrator will commit funds based on those agreements until total payments committed during a funding year have exhausted any funds carried over from previous years and there are only \$250 million in funds available for the funding year. Thereafter, the Joint Board's proposed system of priorities will govern the distribution of the remaining \$250 million.¹³⁹⁷

536. The administrator shall measure commitments against the funding caps and trigger points based on the contractually-specified non-recurring expenditures, such as for internal connection services, and recurring flat-rate charges for telecommunications services and other supported services that a school or library has agreed to pay and the commitment of an estimated variable usage charge, based on documentation from the school or library of the estimated expenditures that it has budgeted to pay for its share of usage charges. Schools and

¹³⁹⁴ *McKinsey Report* at 58.

¹³⁹⁵ Recommended Decision, 12 FCC Rcd at 370.

¹³⁹⁶ Schools and libraries may require that those agreements be made contingent on universal service funding approval.

¹³⁹⁷ Recommended Decision, 12 FCC Rcd at 370-371.

libraries must file their contracts either electronically or by paper copy. Moreover, schools and libraries must file new funding requests for each funding year. Such requests will be placed in the funding queue based on the date and time they are received by the administrator.

537. We conclude that these rules will give schools the certainty they need for budgeting, while avoiding the need for the administrator to accumulate, prioritize, and allocate all discounts at the beginning of each funding year, as some commenters suggest.¹³⁹⁸ Some uncertainty may remain about whether an institution will receive the same level of discount from one year to the next because demand for funds may exceed the funds available. If that does occur, we cannot guarantee discounts in the subsequent year without placing institutions that have not formulated their telecommunications plans in the previous year at a disadvantage, possibly preventing such entities from receiving any universal service support -- a concern raised by some commenters.¹³⁹⁹ We acknowledge that requiring annual refiling for recurring charges places an additional administrative burden on eligible institutions. We find, however, that allowing funding for recurring charges to carry forward from one funding year to the next would favor those who are already receiving funds and might deny any funding to those who had never received funding before.

538. Therefore, we find that, if the administrator estimates that the \$2.25 billion cap will be reached for the current funding year, it shall recommend to the Commission a reduction in the guaranteed percentage discounts necessary to permit all expected requests in the next funding year to be fully funded as discussed in more detail, below. Because educational institutions' funding needs will vary greatly, we find that a per-institution cap, as proposed by AT&T, is likely to lead to arbitrary results and be difficult to administer.¹⁴⁰⁰ For example, if the per-institution cap were tied to factors such as number of students and the level of discount for which the institution is eligible, as AT&T suggests,¹⁴⁰¹ this would limit eligible high schools to the same level of support as eligible elementary schools of equal size, even if the former had substantially greater needs for support. We are not aware of any practical way to make fair and equitable adjustments for such varying needs. We also agree with the Joint Board's decision and rationale for rejecting the concept of setting fund levels for each state, and thus reject BANX's proposal¹⁴⁰² for establishing a cap on funds flowing to each state.

539. Effect of the Trigger. We adopt the Joint Board's recommendation that, once

¹³⁹⁸ See, e.g., RTC comments at 39-40.

¹³⁹⁹ See, e.g., PacTel comments at 53; New York DOE comments at 2.

¹⁴⁰⁰ AT&T comments at 21.

¹⁴⁰¹ AT&T comments at 21.

¹⁴⁰² BANX reply comments at 23.

there is only \$250 million in funds available to be committed in a given funding year, "only those schools and libraries that are most economically disadvantaged and ha[ve] not yet received discounts from the universal service mechanism in the previous year would be granted guaranteed funds, until the cap [is] reached."¹⁴⁰³ The Joint Board recommended that "[o]ther economically disadvantaged schools and libraries" should have second priority, followed by "all other eligible schools and libraries."¹⁴⁰⁴ Although, as the Joint Board recommended, the priority system should give first priority to the most economically disadvantaged institutions that have received no discounts in the previous funding year, we are also concerned that the prioritization process not disrupt institutions' ongoing programs that depend upon the discounts.

540. To achieve the Joint Board's goals, we establish a priority system that will operate as follows. The administrator shall ensure, as explained below,¹⁴⁰⁵ that the total level of the administrator's commitments, as well as the day that only \$250 million remains available under the cap in a funding year, are made publicly available on the administrator's website on at least a weekly basis.¹⁴⁰⁶ If the trigger is reached, the administrator will ensure that a message is posted on the website, notify the Commission, and take reasonable steps to notify the educational and library communities that commitments for allocating the remaining \$250 million of support will be made only to the most disadvantaged eligible schools and libraries for the next 30 days (or the remainder of the funding year, whichever is shorter). That is, during the 30-day period, applications from schools and libraries will continue to be accepted and processed, but the administrator will only commit funds to support discount requests from schools and libraries that are in the two most disadvantaged categories on the discount matrix and that did not receive universal service supported discounts in the previous or current funding years. We provide, however, that schools and libraries that received discounts only for basic telephone service in the current or prior year shall not be deemed to have received discounts for purposes of the trigger mechanism.¹⁴⁰⁷ For this purpose, we will ignore support for basic telephone service, because we do not want to discourage disadvantaged schools and libraries from seeking support for this service to avoid forfeiting their priority status for securing support for more advanced services. After the initial 30-day period, if uncommitted funds remain, the administrator will process any requests it received during that period from eligible institutions in the two most disadvantaged categories that had previously received funds. If funds still remain, the administrator will

¹⁴⁰³ Recommended Decision, 12 FCC Rcd at 370.

¹⁴⁰⁴ Recommended Decision, 12 FCC Rcd at 370.

¹⁴⁰⁵ See *infra* section X.D.2.

¹⁴⁰⁶ See *infra* section X.D.2. for a discussion of the website, which will also be used for posting service requests.

¹⁴⁰⁷ Discounts on institutions' recurring charges that have already been filed with the administrator will have already been approved and will not be affected by this procedure.

allocate the remaining available funds to schools and libraries in the order that their requests were received until the \$250 million is exhausted or the funding year ends.

541. While NTIA asserts that lowering the trigger to \$1.5 billion would benefit disadvantaged schools and libraries by ensuring that they were notified while \$750 million was still available rather than waiting until only \$250 million was available,¹⁴⁰⁸ there is also a cost to the lower trigger. If the trigger is reached, it prevents any other schools or libraries from securing commitments of support until the trigger period, which we set at 30 days, expires. We do not expect that total requests for support during the funding year will reach \$2 billion until the end of the funding year, if at all, and, therefore, we expect that no school or library will need to face a potential 30-day delayed response from the administrator. If, however, we lower the trigger to \$1.5 billion, that trigger is much more likely to be reached and may create the delay in funding requests, even if the delay ultimately proves unnecessary because the full funding cap in fact is not exceeded in that funding year. Because we do not expect requests to exceed the cap, we conclude that the increased likelihood of unnecessary delays to school and library funding outweighs the benefit of a 30-day period in which the most disadvantaged schools and libraries would have exclusive access to \$750 million, rather than \$250 million. We can, of course, adjust the trigger later, if experience so warrants.

542. Adjustments to Discount Matrix. We have established the discount levels in this Order based on the Joint Board's estimate of the level of expenditures that schools and libraries are likely to have.¹⁴⁰⁹ We do not anticipate that the cost of funding discount requests will exceed the cap, and we do not want to create incentives for schools and libraries to file discount requests prematurely to ensure full funding. Furthermore, we will consider the need to revise the cap in our three-year review proceeding, but if estimated funding requests for the following funding year demonstrate that the funding cap will be exceeded, we will consider lowering the guaranteed percentage discounts available to all schools and libraries, except those in the two most disadvantaged categories, by the uniform percentage necessary to permit all requests in the next funding year to be fully funded. We will direct the administrator to determine the appropriate adjustments to the matrix based on the estimates schools and libraries make of the funding they will request in the following funding year. The administrator must then request the Commission's approval of the recommended adjustments. After seeking public comment on the administrator's recommendation, the Commission will then approve any reduction in such guaranteed percentage discounts that it finds to be in the public interest. If funds remain under the cap at the end of a funding year in which discounts have been reduced below those set in the matrix, the administrator shall consult with the Commission to establish the best way to distribute those funds.

¹⁴⁰⁸ NTIA reply comments at 28-29.

¹⁴⁰⁹ See Recommended Decision, 12 FCC Rcd at 369.

543. We conclude that this percentage reduction of discounts is less disruptive than alternatives, such as RTC's proposal to provide discounts initially for only telecommunications services, phasing in discounts for internal connections and Internet access thereafter.¹⁴¹⁰ Many schools and libraries have expressed an immediate need to connect to the Internet and other on-line educational resources;¹⁴¹¹ such connections can only become a reality if these institutions receive funding for internal connections and Internet access. In addition, competitive neutrality would be jeopardized if telecommunications services and internal connections are accorded different treatment. Furthermore, if absolute priority is given to the most disadvantaged schools, then no other school could rely on or receive a discount until the end of the funding year, thereby preventing many schools from participating in the program if they did not have both the cash flow to make payments before universal service support funds were released and the ability to take the risk that they would not receive any universal service support funds.

544. Advance Payment for Multi-Year Contracts. We conclude that providing funding in advance for multiple years of recurring charges could enable a wealthy school to guarantee that its full needs over a multi-year period were met, even if other schools and libraries that could not afford to prepay multi-year contracts were faced with reduced percentage discounts if the administrator estimated that the funding cap would be exceeded in a subsequent year. We are also concerned that funds would be wasted if a prepaid service provider's business failed before it had provided all of the prepaid services. At the same time, we recognize that educators often will be able to negotiate better rates for pre-paid/multi-year contracts, reducing the costs that both they and the universal service support mechanisms incur. Therefore, we conclude that while eligible schools and libraries should be able to enter into pre-paid/multi-year contracts for supported services, the administrator will only commit funds to cover the portion of a long-term contract that is scheduled to be delivered and installed during the funding year. Eligible schools and libraries may structure their contracts so that payment is required on at least a yearly basis, or they may enter into contracts requiring advance payment for multiple years of service. If they choose the advance payment method, eligible schools and libraries may use their own funds to pay full price for the portion of the contract exceeding one year (pro rata), and may request that the service provider seek universal service support for the pro rata annual share of the pre-

¹⁴¹⁰ See RTC comments at 40.

¹⁴¹¹ See, e.g., Letter from David Henslee, Babler Elementary School, to Chmn. Reed E. Hundt, FCC, dated September 11, 1996; Letter from Richard Hess, Shawano-Gresham School District, to Chmn. Reed E. Hundt, FCC, dated March 31, 1997; Letter from Edson P. Sheppard, Jr., The Leelanua Center for Education, to Chmn. Reed E. Hundt, FCC, dated April 9, 1997; Letter from Ida E. Ward, Eastside Union School District, to Chmn. Reed E. Hundt, FCC, dated April 18, 1997; Letter from Bob Sondheimer, Education Association of Charles County, to Chmn. Reed E. Hundt, FCC, dated April 22, 1997; Stephen R. Cascaden, Whitewater Public Schools, to Chmn. Reed E. Hundt, FCC, dated April 23, 1997; Letter from Joyce Decker Wegner, Lake County, dated April 23, 1997; Letter from Benny L. Gooden, Fort Smith Public Schools, to Chmn. Reed E. Hundt, FCC, dated April 23, 1997; Letter from Lynn Hartweger, Bushnell-Prairie City Community Unit School District #170, to Chmn. Reed E. Hundt, FCC, dated April 23, 1997.

payment. The eligible school or library may also request that the service provider rebate the payments from the support mechanisms that it receives in subsequent years to the school or library, to the extent that the school or library secures approval of discounts in subsequent years from the administrator.

f. Existing Contracts

545. We agree with the recommendation of the Joint Board¹⁴¹² and a number of commenters¹⁴¹³ that we should permit schools and libraries to apply the relevant discounts we adopt in this Order to contracts that they negotiated prior to the Joint Board's Recommended Decision for services that will be delivered and used after the effective date of our rules, provided the expenditures are approved by the administrator according to the procedures set forth above. No discount would apply, however, to charges for any usage of telecommunications or information services or installation or maintenance of internal connections prior to the effective date of the rules promulgated pursuant to this Order. While we will not require schools or libraries to breach existing contracts to become eligible for discounts, this exemption from our competitive bidding requirements shall not apply to voluntary extensions of existing contracts.

546. We conclude that allowing discounts to be applied to existing contract rates for future covered services is appropriate and necessary to ensure schools and libraries affordable access to and use of the services supported by the universal service program. As discussed above and in the Recommended Decision, the concept of affordability contains not only an absolute component, which takes into account, in this case, a school or library's means to subscribe to certain services, but also a relative component, which takes into account whether the school or library is spending a disproportionate amount of its funds on those services.¹⁴¹⁴ Thus, although a school or library might have chosen to devote funds to, for example, certain telecommunications services, it might have done so at considerable hardship and thus at a rate that is not truly affordable. Moreover, some schools and libraries might be bound by contracts negotiated by the state, even though an individual school or library in the state might not be able to afford to purchase any services under the contract unless it is able to apply universal service support discounts to the negotiated rate. Furthermore, allowing discounts to be applied to existing contract rates will ensure affordable access to and use of all the services Congress intended, not just whatever services, however minimal, an individual school or library might have contracted for before the discounts adopted herein were available at a cost that might

¹⁴¹² Recommended Decision, 12 FCC Rcd at 377.

¹⁴¹³ See, e.g., EDLINC comments at 18-19; Illinois Board of Education comments at 3-4; Minnesota Coalition comments at 30.

¹⁴¹⁴ See *supra* section V.B.2. (citing Recommended Decision, 12 FCC Rcd at 151).

preclude it from being able to afford to purchase other services now available at a discount.

547. We will not adopt, however, the requests of some commenters that we release schools and libraries from their current negotiated contracts, or that we adopt a "fresh look" requirement that would obligate carriers with existing service contracts with schools and libraries to participate in a competitive bidding process,¹⁴¹⁵ or that we create a "rebuttable presumption" that existing rates for telecommunications services are reasonable, allowing interested parties to submit objections to existing contracts based on assertions of unreasonable prices, improper cross-subsidization, or anti-competitive conduct by parties.¹⁴¹⁶ PacTel contends that adopting a "fresh look" requirement may have a confiscatory effect on service providers that have not yet recovered costs that were to be amortized over the length of the contract, and thus recommends that schools and libraries electing to rebid an existing contract be required to reimburse the original service provider for any out-of-pocket expenses that the provider has not yet recovered.¹⁴¹⁷ We find that these proposals would be administratively burdensome, would create uncertainty for those service providers that had previously entered into contracts, and would delay delivery of services to those schools and libraries that took the initiative to enter into such contracts. In addition, we have no reason to believe that the terms of these contracts are unreasonable. Indeed, abrogating these contracts or adopting these other proposals would not necessarily lead to lower pre-discount prices, due to the incentives the states, schools, and libraries had when negotiating the contracts to minimize costs.¹⁴¹⁸ Finally, we note there is no suggestion in the statute or the legislative history that Congress anticipated abrogation of existing contracts in this context.

548. We find equally unpersuasive the argument that we should deny schools and libraries the opportunity to apply the discounts we adopt herein to previously negotiated contract rates.¹⁴¹⁹ We disagree with the argument that applying the discounts to existing contract rates would confer an inappropriate advantage upon ILECs because they were most likely the only providers previously in a position to provide service to schools and libraries.¹⁴²⁰ Because schools

¹⁴¹⁵ See, e.g., Community Colleges comments at 18; New York DOE comments at 10.

¹⁴¹⁶ Small Cable reply comments at 8-10.

¹⁴¹⁷ PacTel reply comments at 29.

¹⁴¹⁸ PacTel reply comments at 28 (stating that "[t]here is no guarantee that a new bidding process would produce rates that are even as low as the ones currently in effect, particularly if the current rate is the product of a long-term agreement that has protected the schools and libraries from rate increases.").

¹⁴¹⁹ See, e.g., ALTS comments at 15-16; Cox comments at 12; Teleport comments at 8.

¹⁴²⁰ Cox comments at 12. See also Teleport comments at 8 (stating that applying discounts to existing contracts will effectively bar competitors from potentially lucrative markets and force schools and libraries to remain "captives" of the ILEC).

and libraries are already bound to those contracts regardless of whether discounts are provided, we see no way in which ILECs will be unfairly advantaged.

549. We agree with the Joint Board that schools and libraries, constrained by budgetary limitations and the obligation to pay 100 percent of the contract price, had strong incentives to secure the lowest rates possible when they negotiated the contracts.¹⁴²¹ Thus, we find it appropriate to apply discounts to these presumptively low rates rather than requiring negotiation of new rates. Furthermore, we conclude that it would not be in the public interest to penalize schools and libraries in states that have aggressively embraced educational technologies and have signed long-term contracts for service by refusing to allow them to apply discounts to their pre-existing contract rates.

g. Interstate and Intrastate Discounts

550. We concur with the Joint Board's recommendation that we exercise our authority to provide federal universal service support to fund intrastate discounts.¹⁴²² We also agree with the Joint Board's recommendation that we adopt rules providing federal funding for discounts for eligible schools and libraries on both interstate and intrastate services to the levels discussed above and that we require states to establish intrastate discounts at least equal to the discounts on interstate services as a condition of federal universal service support for schools and libraries in that state.¹⁴²³ While section 254(h)(1)(B) permits the states to determine the level of discount available to eligible schools and libraries with respect to intrastate services,¹⁴²⁴ the Act does nothing to prohibit the Commission from offering to fund intrastate discounts or conditioning that funding on action the Commission finds to be necessary to achieve the goal that the Snowe-Rockefeller-Exon-Kerrey amendment sought to accomplish under this subsection.

551. We do not agree with commenters, such as the New York DOE, that suggest instead that the universal service funds that are collected based on intrastate rates should be provided to the states to spend on education as they choose.¹⁴²⁵ We find that this proposal resembles the state block grant approach that the Joint Board rejected as inconsistent with the intent of Congress.¹⁴²⁶ We agree with the Joint Board and adopt its rationale that block grants

¹⁴²¹ Recommended Decision, 12 FCC Rcd at 377.

¹⁴²² Recommended Decision, 12 FCC Rcd at 378.

¹⁴²³ Recommended Decision, 12 FCC Rcd at 378.

¹⁴²⁴ 47 U.S.C. § 254(h)(1)(B).

¹⁴²⁵ New York DOE comments at 8.

¹⁴²⁶ Recommended Decision, 12 FCC Rcd at 366.

are not consistent with the statutory intent.¹⁴²⁷ On the other hand, we agree with Wyoming's observation that section 254(h)(1)(B) creates a partnership,¹⁴²⁸ insofar as that section permits a state that wants to provide greater discounts or discounts for additional services for schools to do so. In response to Georgia PSC's assertion that our program intrudes upon a state's discretion over funding decisions,¹⁴²⁹ we note that states retain full discretion to require providers to set pre-discount prices for intrastate services even lower than the market might produce and to provide the support required, if any, from intrastate support obligations. We would find such an arrangement consistent with section 254(f)'s directive that "[a] State may adopt regulations not inconsistent with the Commission's rules to preserve and advance universal service."¹⁴³⁰ Furthermore, we concur with the Joint Board that it would also be permissible for states to choose not to supplement the federal program and thus prohibit their schools and libraries from purchasing services at special state-supported rates if the schools and libraries intend to secure federal-supported discounts.¹⁴³¹ Finally, we note that, if a state wishes to provide an intrastate discount mechanism that is less than the federal discount, it may seek a waiver of the requirement that it match the federal discount levels,¹⁴³² although we would only expect to grant such waivers on a temporary basis and only for states with unusually compelling cases.

D. Restrictions Imposed On Schools and Libraries

1. Background

552. Section 254 places four restrictions on schools and libraries receiving services at discounts funded under universal service support mechanisms. First, only certain schools and libraries are eligible for "preferential rates or treatment" under section 254(h).¹⁴³³ To be considered eligible, schools must meet the statutory definition of an elementary or secondary school found in the Elementary and Secondary Education Act of 1965,¹⁴³⁴ must not operate as a

¹⁴²⁷ Recommended Decision, 12 FCC Rcd at 366.

¹⁴²⁸ Wyoming PSC comments at 11-12.

¹⁴²⁹ Georgia PSC reply comments at 27 n.70.

¹⁴³⁰ 47 U.S.C. § 254(f).

¹⁴³¹ Recommended Decision, 12 FCC Rcd at 377.

¹⁴³² Recommended Decision, 12 FCC Rcd at 378.

¹⁴³³ 47 U.S.C. § 254(h)(4).

¹⁴³⁴ 47 U.S.C. § 254(h)(4) and (h)(5)(A). The Elementary and Secondary Education Act of 1965 defines "elementary school" as "a nonprofit institutional day or residential school that provides elementary education, as determined under State law." 20 U.S.C. § 8801(14). The Elementary and Secondary Education Act defines

for-profit business, and must not have an endowment exceeding \$50 million.¹⁴³⁵ To be considered eligible, a library¹⁴³⁶ or library consortium¹⁴³⁷ must be "eligible for assistance from a

"secondary school" as "a nonprofit institutional day or residential school that provides secondary education, as determined under State law, except that such term does not include any education beyond grade 12." 20 U.S.C. § 8801(25).

¹⁴³⁵ See 47 U.S.C. § 254(h)(4).

¹⁴³⁶ Under the Library Services and Technology Act (LSTA), which was enacted on September 30, 1996, "library" is defined to include:

- (A) a public library;
- (B) a public elementary or secondary school library;
- (C) an academic library;
- (D) a research library, which for the purposes of this subtitle means a library that --
 - (i) makes publicly available library services and materials suitable for scholarly research and not otherwise available to the public; and
 - (ii) is not an integral part of an institution of higher education; and
- (E) a private library, but only if the State in which such private library is located determines that the library should be considered a library for purposes of this subtitle.

Pub. L. No. 104-208, § 213(2).

The definition of library upon which the Joint Board relied was contained in the Library Services and Construction Act (LSCA). That Act was repealed and replaced by LSTA. See Pub. L. No. 104-208, § 708(a). The former definition of library, which was contained in the now-repealed LSCA, was as follows:

- ‘Public library’ means a library that serves free of charge all residents of a community, district, or region, and receives its financial support in whole or in part from public funds. Such term also includes a research library, which, for the purposes of this sentence, means a library which --
- (A) makes its services available to the public free of charge;
 - (B) has extensive collections of books, manuscripts, and other materials suitable for scholarly research which are not available to the public through public libraries;
 - (C) engages in the dissemination of humanistic knowledge through services to readers, fellowships, educational and cultural programs, publication of significant research, and other activities; and
 - (D) is not an integral part of an institution of higher education.

20 U.S.C. § 351a(5).

¹⁴³⁷ Under LSTA, "[t]he term ‘library consortium’ means any local, statewide, regional, interstate, or international cooperative association of library entities which provides for the systematic and effective coordination of the resources of school, public, academic, and special libraries and information centers, for improved services for the clientele of such library entities." Pub. L. No. 104-208, § 213(3). See *infra* section X.D.2 for a discussion of the modification to the definition of library consortium adopted in the Order.

State library administrative agency under the Library Services and Technology Act,"¹⁴³⁸ and must not operate as a for-profit business.¹⁴³⁹ Second, telecommunications services and network capacity provided to schools and libraries under section 254(h) "may not be sold, resold, or otherwise transferred by such user in consideration for money or any other thing of value."¹⁴⁴⁰ Third, section 254(h)(1)(B) requires that schools and libraries make a "bona fide request" for services within the definition of universal service.¹⁴⁴¹ Fourth, any such services requested by schools and libraries must be used for "educational purposes."¹⁴⁴²

553. The Recommended Decision addressed issues relating to eligibility, resale, bona fide requests for educational purposes, auditing, and a carrier notification requirement. The Joint Board observed that section 254(h) explicitly defines the class of entities eligible for support.¹⁴⁴³ The Joint Board recommended that eligible schools and libraries be permitted to aggregate their needs for eligible services with those of both eligible and ineligible entities, concluding that those not directly eligible for support should not be permitted to gain eligibility by participating in consortia with those who are eligible.¹⁴⁴⁴ The Joint Board also recommended that the Commission interpret section 254(h)(3) to prohibit any resale whatsoever of services purchased pursuant to a section 254 discount.¹⁴⁴⁵

2. Discussion

554. Eligibility. The Joint Board concluded that, to be eligible for universal service support, a school must meet the statutory definition of an elementary or secondary school found in the Elementary and Secondary Education Act of 1965, must not operate as a for-profit

¹⁴³⁸ 47 U.S.C. § 254(h)(4). Section 254(h)(4) was amended by LSTA, Pub. L. No. 104-208, § 709(a)(8), which was enacted on September 30, 1996. LSCA, 20 U.S.C. § 351 et seq., which was originally cited in § 254(h)(4) among the eligibility of criteria for libraries, was repealed by LSTA. *See* Pub. L. No. 104-208, § 708(a).

¹⁴³⁹ 47 U.S.C. § 254(h)(4).

¹⁴⁴⁰ 47 U.S.C. § 254(h)(3). *See also* Joint Explanatory Statement at 133 (stating that "[n]ew subsection (h)(3) clarifies that telecommunications services and network capacity provided to . . . schools and libraries may not be resold or transferred for monetary gain").

¹⁴⁴¹ 47 U.S.C. § 254(h)(1)(B).

¹⁴⁴² 47 U.S.C. § 254(h)(1)(B).

¹⁴⁴³ Recommended Decision, 12 FCC Rcd at 391.

¹⁴⁴⁴ Recommended Decision, 12 FCC Rcd at 391.

¹⁴⁴⁵ Recommended Decision, 12 FCC Rcd at 393.

business, and must not have an endowment exceeding \$50 million.¹⁴⁴⁶ We agree and conclude that all schools that fall within the definition contained in the Elementary and Secondary Education Act of 1965 and meet the criteria of section 254(h), whether public or private, will be eligible for universal service support. Illinois Board of Education and Community Colleges ask that we expand the definition of schools to include entities that educate elementary and secondary school aged students,¹⁴⁴⁷ and APTS asks that we permit discounts for educational television station licensees as a way to support distance learning.¹⁴⁴⁸ We find, however, consistent with the Joint Board and with SBC's observation,¹⁴⁴⁹ that section 254(h)(5)(A) does not grant us discretion to expand the statutory definition of schools. For the same reason, we must reject the West Virginia Consumer Advocate's suggestion that we presume private and parochial schools to be eligible even if they do not meet the statutory definition of schools.¹⁴⁵⁰

555. We note NTIA's concern that certain tribal schools may not meet the statutory definition of schools and, therefore, may not be eligible for universal service support.¹⁴⁵¹ While 187 schools funded by the Bureau of Indian Affairs were included in the total number of schools cited by the Joint Board, NTIA contends that there may be additional schools established by tribes or tribal organizations.¹⁴⁵² We conclude that, if those schools meet the statutory definition of school and the other eligibility criteria under section 254(h), they will be eligible for universal service support. We also conclude that section 254(h)(5)(A) does not give us the discretion to provide universal service support to any entity educating elementary and secondary school aged children unless that entity meets the statutory definition of school.

556. Section 254(h)(5) does not include an explicit definition of libraries eligible for

¹⁴⁴⁶ 47 U.S.C. § 254(h)(4). *See also* Recommended Decision, 12 FCC Rcd at 391. The Elementary and Secondary Education Act of 1965 can be found at 20 U.S.C. § 8801(14) and (25).

¹⁴⁴⁷ Illinois Board of Education comments at 10-11; Community Colleges comments at 5-6.

¹⁴⁴⁸ APTS comments at 5-6.

¹⁴⁴⁹ SBC reply comments at 23.

¹⁴⁵⁰ West Virginia Consumer Advocate comments at 1-12.

¹⁴⁵¹ NTIA reply comments at 26-27.

¹⁴⁵² NTIA reply comments at 27 n.52.

support.¹⁴⁵³ Rather, in section 254(h)(4)'s eligibility criteria, Congress cited LSCA.¹⁴⁵⁴ The Joint Board, therefore, used the definition of library found in Title III of the LSCA.¹⁴⁵⁵ In late 1996, however, Congress amended section 254(h)(4) to replace citation to the LSCA with a citation to the newly enacted LSTA.¹⁴⁵⁶ In light of this amendment to section 254(h)(4), we find it necessary to look anew at the definitions of library and library consortium and adopt definitions that are consistent with the directives of section 254(h).

557. LSTA defines a library more broadly than did the former LSCA and includes, for example, academic libraries and libraries of primary and secondary schools.¹⁴⁵⁷ If, for purposes of determining entities eligible for universal service support, we were to adopt a definition that includes academic libraries, we are concerned that the congressional intent to limit the availability of discounts under section 254(h) could be frustrated. Specifically, in section 254(h)(5), Congress limited eligibility for support to elementary and secondary schools that meet certain criteria, choosing to target support to K-12 schools rather than attempting to cover the broader set of institutions of higher learning. If we were to adopt the new expansive definition of library, institutions of higher learning could assert that their libraries, and thus effectively

¹⁴⁵³ Section 254(h)(4) explicitly excludes certain libraries from eligibility for universal service support, but section 254 does not define which libraries are eligible for support. *See* 47 U.S.C. § 254(h)(4).

¹⁴⁵⁴ Prior to its amendment discussed *infra*, section 254(h)(4) read as follows:

<p>ELIGIBILITY OF USERS.- No entity listed in this subsection shall be entitled to preferential rates or treatment as required by this subsection, if such entity operates as a for-profit business, is a school described in paragraph (5)(A) with an endowment of more than \$50,000,000, or <i>is a library not eligible for based plans for funds under title III of the Library Services U.S.C. § 335c et seq.</i></p>	<p>to operates an endowment <i>participation in State- and Construction Act (20</i></p>
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47 U.S.C. § 254(h)(4) (emphasis added).

¹⁴⁵⁵ 47 U.S.C. § 254(h)(4).

¹⁴⁵⁶ Section 254(h)(4) now reads as follows:

<p>ELIGIBILITY OF USERS. - No entity listed in this subsection shall be entitled to preferential rates or treatment as required by this subsection, if such entity operates as a for-profit business, is a school described in paragraph (5)(A) with an endowment of more than \$50,000,000, or <i>is a library or library consortium eligible for assistance from a State library administrative agency under the Services and Technology Act.</i></p>	<p><i>not Library</i></p>
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47 U.S.C. § 254(h)(4) (as amended) (emphasis added).

¹⁴⁵⁷ *See* Pub. L. No. 104-208, § 213(2).

their entire institutions, were eligible for support. For example, a university could establish "branch libraries" in classrooms and even student dormitories, making them eligible for universal service support as "academic libraries." Such a scenario could result in otherwise ineligible institutions receiving universal service support, thus draining a substantial amount of the support Congress intended for eligible schools and libraries. Similarly, elementary or secondary schools with endowments of more than \$50 million that would otherwise be excluded from receiving support under section 254(h)(4) could establish "branch libraries" in each classroom, making them eligible for universal service support as elementary or secondary school libraries. This scenario would also result in otherwise ineligible entities, i.e., elementary and secondary schools with endowments exceeding \$50 million, draining a significant amount of universal service support away from entities that Congress specifically targeted for support. Both of these outcomes would circumvent the section 254(h) limitation on support to eligible elementary and secondary schools, would contradict Congress's intent to target support to K-12 schools and libraries, and would inflict the most harm upon the economically disadvantaged schools and libraries eligible for the greatest percentages of universal service support.

558. We, therefore, adopt the LSTA definition of library for purposes of section 254(h), but we conclude that a library's eligibility for universal service funding will depend on its funding as an independent entity. That is, because institutions of higher education are not eligible for universal service support, an academic library will be eligible only if its funding is independent of the funding of any institution of higher education. By "independent," we mean that the budget of the library is completely separate from any institution of learning. This independence requirement is consistent with both congressional intent and the expectation of the Joint Board that universal service support would flow to an institution of learning only if it is an elementary or secondary school.¹⁴⁵⁸ Similarly, because elementary and secondary schools with endowments exceeding \$50 million are not eligible for universal service support,¹⁴⁵⁹ a library connected to such a school will be eligible only if it is funded independently from the school.

559. We adopt the independent library requirement because we are also concerned that, in some instances where a library is attached, for funding purposes, to an otherwise eligible school, the library could attempt to receive support twice, first as part of the school and second as an independent entity. We find that the independence requirement will ensure that an elementary or secondary school library cannot collect universal service support twice for the same services.

560. When Congress amended section 254(h)(4) in late 1996, it added the term

¹⁴⁵⁸ See 47 U.S.C. § 254(h)(1)(B); 47 U.S.C. § 254(h)(4); 47 U.S.C. § 254 (h)(5); 12 FCC Rcd at 391.

¹⁴⁵⁹ See 47 U.S.C. § 254(h)(4).

"library consortium" to the entities potentially eligible for universal service support.¹⁴⁶⁰ We adopt the definition of library consortium as it is defined in LSTA, with one modification. We eliminate "international cooperative association of library entities" from our definition of library consortia eligible for universal service support because we conclude that this modified definition is consistent with the directives of section 254(h).

561. We find that the inclusion of "library consortium" in the LSTA definition of library should address the concern of MassLibrary that library consortia be eligible for universal service support.¹⁴⁶¹ Moreover, in response to Community Colleges,¹⁴⁶² we conclude that community college libraries are eligible for support only if they meet the definition above and other requirements of section 254(h). In addition, as described above, the Joint Board recommended, and we agree, that all eligible schools and libraries should be permitted to enter into consortia with other schools and libraries.¹⁴⁶³

562. The Joint Board concluded that entities not explicitly eligible for support should not be permitted to gain eligibility for discounts by participating in consortia with those who are eligible, even if the former seek to further educational objectives for students who attend eligible schools.¹⁴⁶⁴ We agree with, and therefore adopt, this Joint Board recommendation. Nevertheless, we look to ineligible schools and libraries to assume leadership roles in network planning and implementation for educational purposes. Although we conclude that Congress did not intend that we finance the costs of network planning by ineligible schools and libraries through universal service support mechanisms, we encourage universities and other repositories of information to make their online facilities available to other schools and libraries. We note that eligible schools and libraries will be eligible for discounts on any dedicated lines they purchase to connect themselves to card catalogues or databases of scientific or other educational data maintained by colleges or universities, databases of research materials maintained by religious institutions, and any art or related materials maintained by private museum archives. Connections between eligible and ineligible institutions can be purchased by an eligible institution subject to the discount as long as the connection is used for the educational purposes of the eligible institution. For example, an eligible school could use universal service support discounts to pay for satellite connections to enable students or teachers to participate in academic symposiums or lectures, but not to receive live broadcasts of sporting events.

¹⁴⁶⁰ See 47 U.S.C. § 254(h)(4). See *supra* section X.D.1. for a discussion of the amendment of section 254(h)(4).

¹⁴⁶¹ MassLibrary comments at 1-2.

¹⁴⁶² Community Colleges comments at 11.

¹⁴⁶³ See *supra* section X.C.2.a.

¹⁴⁶⁴ Recommended Decision, 12 FCC Rcd at 391.

563. In response to Benton's, NASTD's, and Georgia PSC's comments,¹⁴⁶⁵ we emphasize that we encourage all eligible entities to participate in consortia because such participation should enable them to secure the telecommunications and information services and facilities they need under terms and conditions better than they could negotiate alone. We conclude that, because they may be able to offer service providers economies of scale and scope that reduce the costs of serving them, consortia may be able to negotiate lower prices with providers competing to serve them better than schools or libraries could on their own. Although consortia-negotiated prices might commonly be characterized as "discounted prices," because they are lower than the prices that individual members of the consortia would be able to secure on their own, we still characterize them as "pre-discount prices" for the purposes of section 254(h) because they are the prices eligible schools and libraries could obtain even without application of the relevant universal service support discounts.¹⁴⁶⁶ All members of such consortia, including those ineligible for universal service support, would benefit from these lower "pre-discount" prices produced by such statewide, regional, or large group contracts.

564. While those consortium participants ineligible for support would pay the lower pre-discount prices negotiated by the consortium, only eligible schools and libraries would receive the added benefit of universal service discount mechanisms. Those portions of the bill representing charges for services purchased by or on behalf of and used by an eligible school, school district, library, or library consortia for educational purposes would be reduced further by the discount percentage to which the school or library using the services was entitled under section 254(h). The service provider would collect that discount amount from universal service support mechanisms. The prices for services that were not actually used by eligible entities for educational purposes would not be reduced below the contract price.

565. Finally, several commenters ask that universal service support be targeted to schools and libraries serving individuals with disabilities.¹⁴⁶⁷ We acknowledge the barriers faced by individuals with disabilities in accessing telecommunications, and we note that individuals with disabilities attending eligible schools and using the resources of eligible libraries will benefit from universal service support mechanisms to the extent that those institutions qualify for universal service support.¹⁴⁶⁸ We agree with the Joint Board, however, that the specific barriers faced by individuals with disabilities in accessing telecommunications are best addressed

¹⁴⁶⁵ Benton reply comments at 6-7; Georgia PSC reply comments at 27-29; NASTD *ex parte* comments (Feb. 12, 1997).

¹⁴⁶⁶ See *supra* section X.C.2.a. for a discussion of pre-discount prices.

¹⁴⁶⁷ See, e.g., United Cerebral Palsy Ass'n comments at 8-10; Universal Service Alliance comments at 6-7; Consumer Action reply comments at 2-3.

¹⁴⁶⁸ For a further discussion of individuals with disabilities in the context of universal service, see *supra* section III (principles) and section VIII (low-income).

in the proceeding to implement section 255 of the Act.¹⁴⁶⁹ As we concluded in the low-income section of this Order, neither the text nor the legislative history of section 254 indicates that Congress intended for us to create new support mechanisms targeted specifically to individuals with disabilities.¹⁴⁷⁰

566. Resale. Section 254(h)(3) bars entities that obtain discounts from reselling the discounted services. It states that:

Telecommunications services and network capacity provided [to schools or libraries at a discount] may not be sold, resold, or otherwise transferred by such user in consideration for money or any other thing of value.¹⁴⁷¹

We concur with the Joint Board's recommendation that we not interpret the section 254(h)(3) bar to apply only to resale for profit.¹⁴⁷² To adopt the suggestion of EDLINC¹⁴⁷³ and permit waivers for resale to entities that serve educational purposes would permit schools and libraries to circumvent the eligibility requirements discussed above and would provide services at a discount to entities that Congress did not choose to cover. Moreover, adopting EDLINC's suggestion would rapidly deplete the funds available to the eligible schools and libraries that Congress intended to benefit from the universal service discount program. The same reasoning applies to the request by the Vermont PSB that schools and libraries be permitted to resell services if they charge the discounted prices that they pay for them.¹⁴⁷⁴ We agree with the Joint Board's recommendation that we interpret section 254(h)(3) to restrict any resale whatsoever of services purchased pursuant to a section 254 discount to entities that are not eligible for support.¹⁴⁷⁵

567. We agree, however, with the Vermont PSB that the section 254(h)(3) prohibition

¹⁴⁶⁹ 47 U.S.C. § 255. The Commission took the first step toward implementing section 255 with the release of a *Notice of Inquiry* on September 19, 1996. *See* Implementation of Section 255 of the Telecommunications Act of 1996, *Notice of Inquiry*, WT Docket No. 96-198, FCC 96-382 (rel. Sept. 19, 1996). *See also* Telecommunications Relay Services, the Americans with Disabilities Act of 1990, and the Telecommunications Act of 1996, *Notice of Inquiry*, CC Docket No. 90-571, FCC 97-7 (rel. Jan. 14, 1997).

¹⁴⁷⁰ *See supra* section VIII.

¹⁴⁷¹ 47 U.S.C. § 254(h)(3).

¹⁴⁷² Recommended Decision, 12 FCC Rcd at 393.

¹⁴⁷³ EDLINC comments at 18.

¹⁴⁷⁴ Vermont PSB comments at 20.

¹⁴⁷⁵ Recommended Decision, 12 FCC Rcd at 393.

on resale does not prohibit an eligible entity from charging fees for any services that schools or libraries purchase that are not subject to a universal service discount.¹⁴⁷⁶ Thus, an eligible school or library may assess computer lab fees to help defray the cost of computers or training fees to help cover the cost of training because these purchases are not subsidized by the universal service support mechanisms. We also observe that, if eligible schools, libraries, or consortia amend their approved service contracts to permit another eligible school or library to share the services for which they have already contracted, it would not constitute prohibited resale, as long as the services used are only discounted by the amount to which the eligible entity actually using the services is entitled.

568. We recognize that the prohibition on resale creates some tension with our decision to permit purchasing consortia that include both eligible and ineligible public sector institutions, even though discounts would only apply to services purchased by eligible institutions. On the one hand, we are concerned that permitting eligible and ineligible buyers to commingle their purchases would permit eligible schools and libraries to transfer the use of their discount to ineligible entities in violation of the prohibition on resale. On the other hand, as we explained above, we want to encourage eligible institutions to aggregate their demands with others to enable them to enjoy efficiencies and negotiate favorable arrangements with service providers. As the Senate Working Group stated, the Act "should not hinder or preclude the creative development of consortia among education[al] institutions."¹⁴⁷⁷ Limiting such consortia to include only other K-12 schools and libraries could severely constrain their ability to achieve sufficient demand to attract potential competitors and thereby to negotiate lower rates or at least secure efficiencies, particularly in lower density regions. Permitting schools and libraries to aggregate with other ineligible public sector institutions, including state colleges and universities, state educational broadcasters, and municipalities, could enable the eligible entities to secure lower pre-discount rates, thereby diminishing both their costs and the amount of money required to finance a given percentage discount. In fact, many schools and libraries rely primarily, if not solely, on access to the Internet through networks managed by their states.¹⁴⁷⁸ The difficulty, then, is how to allow eligible institutions to aggregate their demand with ineligible entities while diminishing the likelihood of illegal resale through the extension of discounts to services used by ineligible entities.

569. We concur with the Joint Board's conclusion that, despite the difficulties of allocating costs and preventing abuses, the benefits of permitting schools and libraries to join in consortia with other customers, as discussed above, outweigh the danger that such aggregations

¹⁴⁷⁶ Vermont PSB comments at 19.

¹⁴⁷⁷ Senate Working Group NPRM further comments at 2. *See also* U.S. Distance Learning Ass'n NPRM comments at 20.

¹⁴⁷⁸ *See, e.g.*, Georgia PSC reply comments at 27-29. The states of Tennessee, Texas, Iowa, and Utah also have statewide networks. *Cf. NASTD ex parte* comments (February 12, 1997).

will lead to significant abuse of the prohibition against resale.¹⁴⁷⁹ The Joint Board reached this conclusion based on three findings, and we concur with each of them. First, the Joint Board found that the only way to avoid any possible misallocations by eligible schools and libraries would be to limit severely all consortia, even among eligible schools and libraries, because it is possible that consortia including schools and libraries eligible for varying discounts could allocate costs in a way that does not precisely reflect each school's or library's designated discount level. We agree with the Joint Board's conclusion that severely limiting consortia would not be in the public interest because it would serve to impede schools and libraries from becoming attractive customers or from benefiting from efficiencies, such as those secured by state networks.¹⁴⁸⁰ Second, illegal resale, whereby eligible schools and libraries use their discounts to reduce the prices paid by ineligible entities, can be substantially deterred by a rule requiring providers to keep and retain careful records of how they have allocated the costs of shared facilities in order to charge eligible schools and libraries the appropriate amounts. These records should be maintained on some reasonable basis, either established by the Commission or the administrator, and should be available for public inspection. We concur with the Joint Board's conclusion that reasonable approximations of cost allocations should be sufficient to deter significant abuse.¹⁴⁸¹ Third, we share the Joint Board's expectation that the growing bandwidth requirements of schools and libraries will make it unlikely that other consortia members will be able to rely on using more than their paid share of the use of a facility.¹⁴⁸² This will make fraudulent use of services less likely to occur. We also agree with the Joint Board's recommendation that state commissions should undertake measures to enable consortia of eligible and ineligible public sector entities to aggregate their purchases of telecommunications services and other services being supported through the discount mechanism, in accordance with the requirements set forth in section 254(h).¹⁴⁸³

570. Bona Fide Request for Educational Purposes. Section 254(h)(1)(B) limits discounts to services provided in response to bona fide requests made for services to be used for educational purposes.¹⁴⁸⁴ We concur with the Joint Board's finding that Congress intended to require accountability on the part of schools and libraries and, therefore, we concur with the

¹⁴⁷⁹ Recommended Decision, 12 FCC Rcd at 392. *See supra* section X.C.2 (permitting eligible schools and libraries participating in consortia with other eligible schools and libraries, as well as with ineligible public sector (governmental) members, to qualify for universal service discounts).

¹⁴⁸⁰ Recommended Decision, 12 FCC Rcd at 392.

¹⁴⁸¹ Recommended Decision, 12 FCC Rcd at 392.

¹⁴⁸² Recommended Decision, 12 FCC Rcd at 392.

¹⁴⁸³ Recommended Decision, 12 FCC Rcd at 392.

¹⁴⁸⁴ 47 U.S.C. § 254(h)(1)(B).

Joint Board's recommendation and the position of most commenters that eligible schools and libraries be required to: (1) conduct internal assessments of the components necessary to use effectively the discounted services they order; (2) submit a complete description of services they seek so that it may be posted for competing providers to evaluate; and (3) certify to certain criteria under penalty of perjury.

571. Because we find that the needs of educational institutions are complex and substantially different from the needs of other entities eligible for universal service support pursuant to this Order, we will require the administrator, after receiving recommendations submitted by the Department of Education, to select a subcontractor to manage exclusively the application process for eligible schools and libraries, including dissemination and review of applications for service and maintenance of the website on which applications for service will be posted for competitive bidding by carriers. The important criteria in recommending eligible subcontractors are: familiarity with the telecommunications and technology needs of educational institutions and libraries; low administrative costs; and familiarity with the procurement processes of the states and school districts. Moreover, we will consult with the Department of Education in designing the applications for this process. We will require those applications to include, at a minimum, certain information and certifications.

572. First, we will require applications to include a technology inventory/assessment. We expect that, before placing an order for telecommunications or information services, the person authorized to make the purchase for a school or library would need to review what telecommunications-related facilities the school or library already has or plans to acquire. In this regard, applicants must at a minimum provide the following information, to the extent applicable to the services requested:

- (1) the computer equipment currently available or budgeted for purchase for the current, next, or other future academic years, as well as whether the computers have modems and, if so, what speed modems;
- (2) the internal connections, if any, that the school or library already has in place or has budgeted to install in the current, next, or future academic years, or any specific plans relating to voluntary installation of internal connections;¹⁴⁸⁵
- (3) the computer software necessary to communicate with other computers over an internal network and over the public telecommunications network currently available or budgeted for purchase for the current, next, or future academic years;
- (4) the experience of and training received by the relevant staff in the use of the equipment to be connected to the telecommunications network and training programs for which funds are committed for the current, next, or future academic years;
- (5) existing or budgeted maintenance contracts to maintain computers; and
- (6) the capacity of the school's or library's electrical system to handle simultaneous uses.

¹⁴⁸⁵ See *supra* section X.B.2.c. for an explanation of NetDays.

573. In addition, schools and libraries must prepare specific plans for using these technologies, both over the near term and into the future, and how they plan to integrate the use of these technologies into their curriculum. Therefore, we concur with the Joint Board's finding that it would not be unduly burdensome to require eligible schools and libraries to "do their homework" in terms of preparing these plans.¹⁴⁸⁶

574. To ensure that these technology plans are based on the reasonable needs and resources of the applicant and are consistent with the goals of the program, we will also require independent approval of an applicant's technology plan, ideally by a state agency that regulates schools or libraries. We understand that many states have already undertaken state technology initiatives,¹⁴⁸⁷ and we expect that more will do so and will be able to certify the technology plans of schools and libraries in their states. Furthermore, plans that have been approved for other purposes, e.g., for participation in federal or state programs such as "Goals 2000" and the Technology Literacy Challenge, will be accepted without need for further independent approval. With regard to schools and libraries with new or otherwise approved plans, we will receive guidance from the Department of Education and the Institute for Museum and Library Services as to alternative approval measures. As noted below, we will also require schools and libraries to certify that they have funds committed for the current funding year to meet their financial obligations set out in their technology plans.

575. Second, we will require the application to describe the services that the schools and libraries seek to purchase in sufficient detail to enable potential providers to formulate bids. Since we agree with the Joint Board's conclusion that Congress intended schools and libraries to avail themselves of the growing competitive marketplace for telecommunications and information services,¹⁴⁸⁸ as discussed above, we concur with the Joint Board's recommendation that schools and libraries be required to obtain services through the use of competitive bidding.¹⁴⁸⁹ Once the subcontractor selected by the administrator receives an application and finds it complete, the subcontractor will post the application, including the description of the services sought on a website for all potential competing service providers to review and submit bids in response, as if they were requests for proposals (RFPs).¹⁴⁹⁰ Moreover, while schools and

¹⁴⁸⁶ Recommended Decision, 12 FCC Rcd at 394.

¹⁴⁸⁷ See New York DOE comments at 9 (suggesting that schools and libraries may be required to conduct technology assessments in response to a state technology initiative).

¹⁴⁸⁸ Recommended Decision, 12 FCC Rcd at 395.

¹⁴⁸⁹ See *supra* section X.C.2. for a discussion of competitive bidding.

¹⁴⁹⁰ See also BellSouth comments at 29 (stating that competitive bidding and posting RFPs on a website "will ensure that many providers will have the opportunity to submit bids, and, thus, brings to the process many benefits which can be gained through the natural operation of competitive forces").

libraries may submit formal and detailed RFPs to be posted, particularly if that is required or most consistent with their own state or local acquisition requirements, we will also permit them to submit less formal descriptions of services, provided sufficient detail is included to allow providers to reasonably evaluate the requests and submit bids. As the Joint Board recognized, many schools and libraries are already required by their local government or governing body to prepare detailed descriptions of any purchase they make above a specified dollar amount, and they may be able to use those descriptions for this purpose as well.¹⁴⁹¹ We emphasize, however, that the submission of a request for posting is in no way intended as a substitute for state, local, or other procurement processes.

576. We will also require that applications posted on the website by the administrator's subcontractor present schools' and libraries' descriptions of services in a way that will enable providers to search among potential customers by zip code, number of students (schools) or patrons (libraries), number of buildings, and other data that the administrator will receive in the applications. We believe that this procedure should enable even potential service providers without direct access to the website to rely on others to conduct searches for them. We also note that schools will submit the percentage of their students eligible for the national school lunch program and libraries will submit the percentage of students eligible for the national school lunch program in the school districts in which they are located to the administrator's subcontractor, in order to enable the administrator to calculate the amount of the applicable discount. This information will also be posted by the administrator on the website to help providers bidding on services to calculate the applicable discounts.

577. Third, we concur with the Joint Board's recommendation that the request for services submitted to the Administrator's subcontractor shall be signed by the person authorized to order telecommunications and other supported services for the school or library, who will certify the following under oath:

- (1) the school or library is an eligible entity under sections 254(h)(4) and 254(h)(5) and the rules adopted herein;
- (2) the services requested will be used solely for educational purposes;
- (3) the services will not be sold, resold, or transferred in consideration for money or any other thing of value;
- (4) if the services are being purchased as part of an aggregated purchase with other entities, the identities of all co-purchasers and the services or portion of the services being purchased by the school or library;
- (5) all of the necessary funding in the current funding year has been budgeted and will have been approved to pay for the "non-discount" portion of requested connections and services as well as any necessary hardware, software, and to undertake the necessary staff training required in time to use the services effectively; and

¹⁴⁹¹ Recommended Decision, 12 FCC Rcd at 395.

(6) they have complied, and will continue to comply, with all applicable state and local procurement processes.

578. We decline to adopt Time Warner's suggestion that we establish guidelines to identify educational purposes in a further effort to prevent fraudulent use of discounted services.¹⁴⁹² Time Warner's concern is addressed by the certification requirements with which schools and libraries must comply and by the potential civil and criminal liability faced by the person authorized to order services for schools and libraries if those services are not used for their intended educational purposes. For example, we may impose a forfeiture penalty under sections 502 and 503(b) of the Act.¹⁴⁹³ In addition, the person authorized to order services for schools and libraries may be liable for false statements under Title 18 of the United States Code for such fraud.¹⁴⁹⁴ Although Vermont PSB asks us to reduce these requirements,¹⁴⁹⁵ we conclude that they are reasonable and not unnecessarily burdensome.

579. We conclude that, to permit all interested parties to respond to those posted requests, schools, libraries, and consortia including such entities should be required to wait four weeks after a description of the services they seek has been posted on the school and library website, before they sign any binding contracts for discounted services. Once they have signed a contract for discounted services,¹⁴⁹⁶ the school, library, or consortium including such entities shall send a copy of that contract to the administrator's subcontractor with an estimate of the funds that it expects to need for the current funding year as well what it estimates it will request for the following funding year. Assuming that there are sufficient funds remaining to be committed, the subcontractor shall commit the necessary funds for the future use of the particular requestor and notify the requestor that its funding has been approved.

580. Once the school, library, or consortium including such entities has received

¹⁴⁹² Time Warner comments at 35-36.

¹⁴⁹³ See 47 U.S.C. § 502 ("[a]ny person who willfully and knowingly violates any rule, regulation, restriction, or condition made or imposed by the Commission under authority of this Act . . . shall, in addition to any other penalties provided by law, be punished, upon conviction thereof, by a fine of not more than \$500 for each and every day during which such offense occurs"); 47 U.S.C. § 503(b) ("[a]ny person who is determined by the Commission . . . to have . . . willfully or repeatedly failed to comply with any . . . rule, regulation, or order issued by the Commission under this Act . . . shall be liable to the United States for a forfeiture penalty").

¹⁴⁹⁴ 18 U.S.C. § 1001.

¹⁴⁹⁵ Vermont PSB comments at 19.

¹⁴⁹⁶ Because the school, library, or consortium including such entities may not be willing to commit to the contract unless it receives a universal service support discount, we would expect that most of the former will choose to make their contracts contingent upon the approval of their funding request, just as purchases of real estate are often made contingent upon the approval of a mortgage.

approval of its purchase order, it may notify the provider to begin service, and once the former has received service from the provider it must notify the administrator to approve the flow of universal service support funds to the provider.

581. Auditing. We agree with the Joint Board recommendation that schools and libraries, as well as carriers, be required to maintain appropriate records necessary to assist in future audits.¹⁴⁹⁷ We share the Joint Board's expectation that schools and libraries will be able to produce such records at the request of any auditor appointed by a state education department, the fund administrator, or any other state or federal agency with jurisdiction that might, for example, suspect fraud or other illegal conduct, or merely be conducting a routine, random audit. We also agree with the Joint Board's recommendation and Vanguard's comments that eligibility for support be conditioned on schools' and libraries' consent to cooperate in future random compliance audits to ensure that the services are being used appropriately.¹⁴⁹⁸ The Commission, in consultation with the Department of Education, will engage and direct an independent auditor to conduct such random audits of schools and libraries as may be necessary. Such information will permit the Commission to determine whether universal service support policies require adjustment. We reject TCI's proposal for more formal annual reports as unnecessarily burdensome, given the likely costs of such reports.

582. Annual Carrier Notification Requirement. We agree with the Joint Board's recommendation and decline to impose a requirement that carriers annually notify schools and libraries about the availability of discounted services.¹⁴⁹⁹ As the Joint Board noted, many national representatives of school and library groups are participating in this proceeding, and we believe that these associations will inform their members of the opportunity to secure discounted telecommunications and other covered services under this program. For example, EDLINC alone represents more than two dozen educational associations.¹⁵⁰⁰ We encourage these groups to notify their members of the universal service programs through trade publications, websites, and conventions. In this regard, we note that the Commission has already participated in numerous outreach efforts aimed at disseminating information on the availability of universal service and support to schools and libraries.¹⁵⁰¹ We also expect that providers of telecommunications services, Internet access, and internal connections will market to schools

¹⁴⁹⁷ Recommended Decision, 12 FCC Rcd at 396.

¹⁴⁹⁸ Recommended Decision, 12 FCC Rcd at 396; Vanguard comments at 7-8.

¹⁴⁹⁹ Recommended Decision, 12 FCC Rcd at 396.

¹⁵⁰⁰ EDLINC comments at app. A.

¹⁵⁰¹ See, e.g., Speech by Irene M. Flannery, Common Carrier Bureau, to Virginia Department of Education, Educational Technology Advisory Committee (Feb. 11, 1997). See also the Commission's education website at www.fcc.gov/learnnet.

and libraries. Thus, while we concur with the Joint Board and decline to require provider notification to schools and libraries, we encourage service providers to notify each school and library association and state department of education in the states they serve of the availability of discounted services annually.

E. Funding Mechanisms for Schools and Libraries

1. Background

583. Section 254(d) provides that "[e]very telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service."¹⁵⁰² Section 254(h)(1)(B) states that a telecommunications carrier providing services to schools and libraries shall:

- (i) have an amount equal to the amount of the discount treated as an offset to its obligation to contribute to the mechanisms to preserve and advance universal service, or
- (ii) . . . receive reimbursement utilizing the support mechanisms to preserve and advance universal service.¹⁵⁰³

584. In the Recommended Decision, the Joint Board recommended that the universal service administrator distribute support for schools and libraries from the same funds used to support other services under section 254, and that the administrator maintain separate accounting categories.¹⁵⁰⁴ The Joint Board also concluded that section 254(h)(1)(B) requires that a telecommunications carrier providing services to schools and libraries be permitted either to apply the amount of the discount afforded to schools and libraries as an offset to its universal service obligations or to be reimbursed for that amount from the universal service support mechanism.¹⁵⁰⁵

2. Discussion

585. Separate Funding Mechanisms. We concur with the Joint Board's recommendation that the universal service administrator distribute support for schools and libraries from the same source of revenues used to support other universal service purposes

¹⁵⁰² 47 U.S.C. § 254(d).

¹⁵⁰³ 47 U.S.C. § 254(h)(1)(B).

¹⁵⁰⁴ Recommended Decision, 12 FCC Rcd at 400.

¹⁵⁰⁵ Recommended Decision, 12 FCC Rcd at 400.

under section 254 because we agree with the Joint Board's conclusion that establishing separate funds would yield minimal, if any, improvement in accountability, while imposing unnecessary administrative costs. We share Ameritech's concern that we must ensure proper accountability for and targeting of the funds for schools and libraries.¹⁵⁰⁶ We agree with the Joint Board that this goal is achievable if the fund administrator maintains separate accounting categories.¹⁵⁰⁷

586. Offset versus Reimbursement. Section 254(h)(1)(B) requires that a telecommunications carrier providing services to schools and libraries shall either apply the amount of the discount afforded to schools and libraries as an offset to its universal service contribution obligations or shall be reimbursed for that amount from universal service support mechanisms.¹⁵⁰⁸ We agree with the Joint Board's conclusion that section 254(h)(1)(B) requires that service providers be permitted to choose either reimbursement or offset.¹⁵⁰⁹ Consistent with EDLINC's suggestion,¹⁵¹⁰ we reject GTE's proposal to permit service providers to demand full payment from schools and libraries, which would require the institutions to secure direct reimbursement from the administrator.¹⁵¹¹ We conclude that requiring schools and libraries to pay in full could create serious cash flow problems for many schools and libraries and would disproportionately affect the most disadvantaged schools and libraries. For purposes of administrative ease, we conclude that service providers, rather than schools and libraries, should seek compensation from the universal service administrator. Many telecommunications carriers will already be receiving funds from the administrator for existing high cost and low-income support, and the administrator would often be dealing with the same entities for the schools and libraries program. To require schools and libraries to seek direct reimbursement would also burden the administrator because of the large number of new entities that would be receiving funds. The GTE proposal would likely lead to monthly disbursements to tens of thousands of schools, school districts, and library systems, without yielding lower costs to either the support programs or schools or libraries.

F. Access to Advanced Telecommunications and Information Services

1. Background

¹⁵⁰⁶ See Ameritech comments at 23.

¹⁵⁰⁷ Recommended Decision, 12 FCC Rcd at 400.

¹⁵⁰⁸ 47 U.S.C. § 254(h)(1)(B).

¹⁵⁰⁹ Recommended Decision, 12 FCC Rcd at 400-401. See *infra* section X.F.2 for a discussion of reimbursement to non-telecommunications carriers.

¹⁵¹⁰ EDLINC comments at 15-16.

¹⁵¹¹ GTE comments at 102-104.

587. Section 254(h)(2)(A) directs the Commission to establish "competitively neutral rules" to "enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and nonprofit elementary and secondary school classrooms . . . and libraries."¹⁵¹² Section 254(h)(2)(B) directs the Commission to establish "competitively neutral rules" to "define the circumstances under which a telecommunications carrier may be required to connect its network to such public institutional telecommunications users."¹⁵¹³ Access to advanced telecommunications services is also included within the six universal service principles established in section 254(b). Section 254(b)(6), captioned, "Access to Advanced Telecommunications Services for Schools, Health Care, and Libraries," states that "[e]lementary and secondary schools and classrooms, . . . and libraries should have access to advanced telecommunications services as described in subsection [254] (h)."¹⁵¹⁴

588. As discussed above, the Joint Board recommended that the Commission provide universal service support to schools and libraries for telecommunications services, Internet access, and internal connections. The Joint Board concluded that its recommendations for providing universal service support under section 254(h) would significantly increase the availability and deployment of telecommunications and information services for school classrooms and libraries, and found that additional steps were not needed to meet Congress's goal of enhancing access to advanced telecommunications and information services.¹⁵¹⁵

2. Discussion

589. As discussed above, we concur with the Joint Board's recommendation that we provide universal service support to eligible schools and libraries for telecommunications services, Internet access, and internal connections. We have, however, relied on sections 254(c)(3) and 254(h)(1)(B), rather than sections 254(h)(2)(A) as proposed by the Joint Board, because we believe the former are the more pertinent sections.¹⁵¹⁶ In addition to the support for such services provided by telecommunications carriers under sections 254(c)(3) and 254(h)(1)(B), discussed in sections X.B.2.b. and X.B.2.c. above, we also agree with the Joint Board's recommendation to provide discounts for Internet access and internal connections

¹⁵¹² 47 U.S.C. § 254(h)(2)(A).

¹⁵¹³ 47 U.S.C. § 254(h)(2)(B).

¹⁵¹⁴ 47 U.S.C. § 254(b)(6).

¹⁵¹⁵ Recommended Decision, 12 FCC Rcd at 409.

¹⁵¹⁶ We also discuss below that sections 254(h)(2)(A) and 4(i) serve as an independent basis of authority.

provided by non-telecommunications carriers,¹⁵¹⁷ which we do under the authority of sections 254(h)(2)(A) and 4(i).

590. Many companies that are not themselves telecommunications carriers will be eligible to provide supported non-telecommunications services to eligible schools and libraries at a discount pursuant to section 254(h)(1) because they have subsidiaries or affiliates owned or controlled by them that are telecommunications carriers.¹⁵¹⁸ In addition, to take advantage of the discounts provided by section 254(h)(1), non-telecommunications carriers can bid with telecommunications carriers through joint ventures, partnerships, or other business arrangements. They also have the option of establishing subsidiaries or affiliates owned or controlled by them that are telecommunications carriers, even if the scope of their telecommunications service activities is fairly limited. Given the ways in which non-telecommunications carriers can be reimbursed for providing discounts to eligible schools and libraries under section 254(h)(1), we conclude that it would create an artificial distinction to exclude those non-telecommunications carriers that do not have telecommunications carrier subsidiaries or affiliates owned or controlled by them, that choose not to create them, or that do not bid together with telecommunications carriers. This distinction is particularly problematic in light of the fact that, as discussed below, explicitly including non-telecommunications carriers, rather than requiring them to participate through subsidiaries, affiliates, or joint ventures, would further serve our competitive neutrality goal. Accordingly, pursuant to authority in sections 254(h)(2)(A) and 4(i) of the Act, non-telecommunications carriers will be eligible to provide the supported non-telecommunications services to schools and libraries at a discount.

591. Section 254(h)(2), in conjunction with Section 4(i),¹⁵¹⁹ authorizes the Commission to establish discounts and funding mechanisms for advanced services provided by non-telecommunications carriers, in addition to the funding mechanisms for telecommunications carriers created pursuant to sections 254(c)(3) and 254(h)(1)(B). The language of section 254(h)(2) grants the Commission broad authority to enhance access to advanced telecommunications and information services, constrained only by the concepts of competitive neutrality, technical feasibility, and economical reasonableness. Thus, discounts and funding mechanisms that are competitively neutral, technically feasible, and economically reasonable that enhance access to advanced telecommunications and information services fall within the broad authority of section 254(h)(2).

592. Furthermore, unlike section 254(h)(1)(A) and (B), section 254(h)(2)(A) does not

¹⁵¹⁷ Recommended Decision, 12 FCC Rcd at 323, 331-32, 335.

¹⁵¹⁸ See *supra* section C.2.a. (discussing the geographic area served by a provider).

¹⁵¹⁹ See, e.g., *Mobile Communications Corp. of America v. FCC*, 77 F.3d 1399 (D.C. Cir.), *cert. denied*, 117 S. Ct. 81 (1996).

limit support to telecommunications carriers. Rather, section 254(h)(2)(A) *supplements* the discounts to telecommunications carriers established by section 254(h)(1) by expressly granting the Commission the authority and directing the Commission to "establish competitively neutral rules . . . to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and non-profit elementary and secondary school classrooms . . . and libraries."¹⁵²⁰ This language is notably broader than the other provisions of section 254, including sections 254(h)(1)(A) and (1)(B) and, unlike these other sections, does not include the phrase "telecommunications carriers." Thus, contrary to arguments raised by many ILECs,¹⁵²¹ we conclude that section 254(e), which provides that "only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific [f]ederal universal service support," is inapplicable to section 254(h)(2).¹⁵²²

593. In this regard, section 254(e) limits the provision of federal universal service support to eligible telecommunications carriers designated under section 214(e). Section 214(e) requires "eligible telecommunications carriers" to "offer the services that are supported by [f]ederal universal service support mechanisms under section 254(c)."¹⁵²³ With respect to schools and libraries, the discount mechanism for those services designated for support under section 254(c) (specifically (c)(3)), is established by section 254(h)(1)(B). This statutory interrelationship demonstrates that the limitation set forth in section 254(e) pertains only to section 254(c) services, which, with respect to schools and libraries, is only relevant to section 254(h)(1)(B). This interpretation is further bolstered by the specific language set forth in section 254(h)(1)(B)(ii), which is an express exemption from the section 254(e) requirement for certain telecommunications carriers (i.e., those that are not "eligible" under section 214(e)). No such exemption language was required for section 254(h)(2)(A) because section 254(e) does not apply to that subsection.

594. We thus find that section 254(h)(2), in conjunction with section 4(i), permits us to empower schools and libraries to take the fullest advantage of competition to select the most cost-effective provider of Internet access and internal connections,¹⁵²⁴ in addition to telecommunications services, and allows us not to require schools and libraries to procure these

¹⁵²⁰ 47 U.S.C § 254(h)(2)(A).

¹⁵²¹ See Ameritech comments at 18-19; Bell Atlantic comments at 21; BellSouth comments at 25-28; PacTel comments at 38-39.

¹⁵²² See *supra* section X.B.2.b., where we note that section 254(h)(1)(B) is not limited to "eligible telecommunications carriers." We read section 254(h)(2) as broadening, not limiting, the Commission's authority, and it would be anomalous if this expanded authority were limited to a subset of carriers.

¹⁵²³ 47 U.S.C. § 214(e).

¹⁵²⁴ See *supra* section X.C.2.a.

supported services only as a bundled package with telecommunications services. This approach is consistent with the requirement in section 254(h)(2) that the rules established under it be "competitively neutral," as well as by the principle of competitive neutrality that we have concluded should be among those overarching principles shaping our universal service policies.¹⁵²⁵ The goal of competitive neutrality would not be fully achieved if the Commission only provided support for non-telecommunications services such as Internet access and internal connections when provided by telecommunications carriers. In that situation, service providers not eligible for support because they are not telecommunications carriers would be at a disadvantage in competing to provide these services to schools and libraries, even if their services would be more cost-efficient.

595. Moreover, interpreting section 254(e) to deny schools and libraries access to discounted offerings from Internet service providers and providers of internal connections that are not telecommunications carriers would be inconsistent with the purpose of section 254(h)(2)(A). Limiting support to telecommunications carriers would reduce the sources from which schools and libraries could obtain discounted Internet access and internal connections, which would reduce competitive pressures on providers to cut their costs and prices and thus could lead to unnecessarily high pre-discount prices. We conclude that Congress intended that schools and libraries secure the most cost-effective, readily available Internet access and internal connections through vigorous competition among all service providers.

596. Further support for our conclusion can be found by comparing section 254(h)(1)(A), which applies only to "any public or nonprofit health care provider *that serves persons who reside in rural areas in that State*,"¹⁵²⁶ with section 254(h)(2), which applies to *all* health care providers. This difference in wording reinforces our conclusion that the charter section 254(h)(2) gives the Commission to "enhance access" to advanced information services encompasses more than the discount-setting obligations and support mechanisms provided to telecommunications carriers under subsection (h)(1). Indeed, in this regard, we note that sections 254(h)(2)(A) and 4(i) serve as an independent basis of authority for the rules adopted pursuant to sections 254(c)(3) and 254(h)(1)(B). For example, as some parties argue, to the extent internal connections are viewed as facilities rather than services,¹⁵²⁷ we have independent jurisdiction to include them in our discount program under authority of sections 254(h)(2)(A) and 4(i).

597. We also reject the argument that providing support to non-telecommunications

¹⁵²⁵ See *supra* section III.

¹⁵²⁶ 47 U.S.C. § 254(h)(1)(A) (emphasis added).

¹⁵²⁷ See Recommended Decision, 12 FCC Rcd 331 n.1581 (*citing* AT&T NPRM reply comments at 21-22; GTE NPRM further comments at 13-15; Sprint NPRM further comments at 4; USTA NPRM further comments at 9-10; U S West NPRM further comments at 6-7).

carriers would violate the competitive neutrality requirement of section 254(h)(2)(A) because non-telecommunications carriers could benefit from universal service support but only telecommunications carriers would be required to contribute to that support.¹⁵²⁸ In section XIII below, we conclude that contribution obligations will be based on revenues from telecommunications. Neither telecommunications carriers nor non-telecommunications carriers will be required, however, to contribute to federal universal service support mechanisms based on their provision of Internet access and non-telecommunications internal connections. Thus, telecommunications carriers' contributions will not place them at a competitive disadvantage as providers of supported non-telecommunications services. Permitting both telecommunications carriers and non-telecommunications carriers to collect universal service support based on discounts afforded to eligible schools and libraries on Internet access and internal connections, therefore, meets the competitive neutrality requirement of section 254(h)(2)(A).

598. We also reject the argument advanced by some commenters that providing support for non-telecommunications carriers would violate the Origination Clause of the United States Constitution,¹⁵²⁹ which states that all bills for raising revenue must originate in the House of Representatives.¹⁵³⁰ These parties assert that, because section 254 originated in the Senate, requiring telecommunications carriers to contribute to universal service support mechanisms from which non-contributors can draw violates the Origination Clause. This argument fails, however, because the fact that the statute allows discounts to be provided to schools and libraries for services provided by non-telecommunications carriers does not convert this valid statute into a revenue-raising measure within the meaning of the Origination Clause. The D.C. Circuit has held that "a regulation is a tax only when its primary purpose judged in legal context is raising revenue."¹⁵³¹ The purpose of section 254(h)(2)(A), however, is to enhance access of schools and libraries to advanced telecommunications and information services, not to raise general revenues. We conclude, therefore, that the schools and libraries program does not violate the Origination Clause.

599. We thus conclude that the same non-telecommunications services eligible for discounts if provided by telecommunications carriers under section 254(h)(1)(B) are eligible for discounts if provided by non-telecommunications carriers under section 254(h)(2)(A).

¹⁵²⁸ See NYNEX comments at 40; PacTel comments at 39.

¹⁵²⁹ U.S. Const., Art. I, § 7, cl. 1.

¹⁵³⁰ See, e.g., ALLTEL comments at 5; PacTel comments at 43; SBC comments at 46-49; Georgia PSC reply comments at 25-26.

¹⁵³¹ See, e.g., *Brock v. Washington Metropolitan Area Transit Authority*, 796 F.2d 481, 488 (D.C. Cir. 1986). See also *Rural Telephone Coalition v. FCC*, 838 F.2d 1307, 1314 (D.C. Cir. 1988) (finding that allocation of 25 percent of "non-traffic sensitive" local telephone exchange costs to interstate jurisdiction so they could be recovered from IXCs was not a tax because primary purpose was not to raise revenue).

Furthermore, though the rules called for by section 254(h)(2)(A) are not required to mirror the discount schedule in section 254(h)(1)(B), we have authority to "enhance access" in this manner. Thus, the requirements that apply to the discount program for services provided by telecommunications carriers, discussed throughout this section, will apply to the discount program for services provided by non-telecommunications carriers, with one exception. Non-telecommunications carriers that are not required to contribute to universal service support mechanisms will be entitled only to reimbursement for the amount of the discount afforded to eligible schools and libraries under section 254(h)(1)(B), whereas telecommunications carriers will be entitled to either reimbursement or an offset to their obligation to contribute to universal service support mechanisms.¹⁵³² Finally, we conclude that although sections 254(c)(3) and 254(h)(1)(B) on the one hand and sections 254(h)(2)(A) and 4(i) on the other hand authorize funding mechanisms under separate statutory authority, these funds can and should be combined into a single fund as a matter of administrative convenience.

600. New York DOE asserts that the Joint Board's recommendation provides no assurances that schools will take advantage of the discounts available under section 254(h)(2) to purchase advanced services rather than simply seeking discounts on the telecommunications services that they currently order.¹⁵³³ We note that POTS lines can be used to access sophisticated information services. We also agree, however, with the Joint Board's conclusion that our actions providing universal service support under section 254(h) will significantly increase the availability and deployment of telecommunications and information services for school classrooms and libraries.¹⁵³⁴ We find that the many requests from commenters that we include access to services using high capacity, including T-1 and T-3 lines, or functionalities such as video conferencing for distance learning, confirm that demand for these services actually exists.¹⁵³⁵ We also concur with the Joint Board's finding that additional steps are not needed at this time to meet Congress's goal of enhancing access to advanced telecommunications and information services,¹⁵³⁶ other than those taken here. Given the discounts available to schools and libraries and their recognition of the importance of providing students with the technological literacy they will need to survive in an information society, we agree with the Joint Board's reasoning and conclude that our action will promote access to advanced telecommunications

¹⁵³² 47 U.S.C. § 254(h)(1)(B). *See supra* section X.E. for a discussion of funding mechanisms for schools and libraries.

¹⁵³³ New York DOE comments at 10.

¹⁵³⁴ Recommended Decision, 12 FCC Rcd at 409.

¹⁵³⁵ *See, e.g.*, Louisiana PSC NPRM comments at 5-6; Missouri PSC NPRM comments at 14; New York Regents NPRM comments at 10; North of Boston Library Exchange NPRM comments at 1; Apple comments at 4; New York DOE comments at 6.

¹⁵³⁶ Recommended Decision, 12 FCC Rcd at 409.

services.

G. Sections 706 and 708 of the 1996 Act

1. Background

601. Section 706 of the 1996 Act directs the Commission and the states to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulatory methods that remove barriers to infrastructure investment."¹⁵³⁷ Section 706 directs the Commission to initiate a Notice of Inquiry within 30 months after enactment of the 1996 Act, i.e., by August 8, 1998, and to complete the inquiry within 180 days of its initiation.¹⁵³⁸

602. Section 708 of the 1996 Act recognizes the National Education Technology Funding Corporation "as a nonprofit corporation operating under the laws of the District of Columbia, and . . . provide[s] authority for Federal departments and agencies to provide assistance to the Corporation."¹⁵³⁹ The purposes of the National Education Technology Funding Corporation include leveraging resources and stimulating investment in educational technology, designating state educational agencies to receive loans or grants from the Corporation, providing loans and grants to state education technology agencies, and encouraging the development of education telecommunications and information technologies through public-private ventures.¹⁵⁴⁰ Section 708 also states that "the [National Education Technology Funding] Corporation shall be eligible to receive discretionary grants, contracts, gifts, contributions, or technical assistance from any Federal department or agency, to the extent otherwise permitted by law."¹⁵⁴¹

603. In the Recommended Decision, the Joint Board concluded that Congress contemplated that section 706 would be the subject of a separate rulemaking proceeding and, therefore, declined to consider section 706 in the context of the section 254 rulemaking

¹⁵³⁷ 1996 Act, sec. 706(a).

¹⁵³⁸ 1996 Act, sec. 706(b).

¹⁵³⁹ 1996 Act, sec. 708(a)(2).

¹⁵⁴⁰ 1996 Act, sec. 708(a)(1)(C).

¹⁵⁴¹ 1996 Act, sec. 708(c)(1).

proceeding.¹⁵⁴² Moreover, the Joint Board did not rely on section 708 to provide advanced services to schools and libraries within the context of this proceeding, and concluded that section 708 should be considered further after implementation of section 254.¹⁵⁴³

2. Discussion

604. Section 254 recognizes the growing importance of technological literacy for successful participation in society and expands the concept of universal service to include assistance for schools and libraries in making technology available to students and the general public. As discussed above, section 254 will help provide support for the deployment of technology to classrooms and libraries across the nation. We recognize that sections 706 and 708 include requirements that would complement the goal of widespread availability of advanced telecommunications services. We concur with the Joint Board's conclusion, however, that Congress contemplated that section 706 would be the subject of a separate rulemaking proceeding. In section 706, Congress directed us to initiate a notice of inquiry within 30 months after the enactment of the 1996 Act, and it further directed us to complete that rulemaking proceeding within 180 days after its initiation.¹⁵⁴⁴ These statutory deadlines differ from the deadlines imposed on the section 254 rulemaking proceeding. The only specific proposal for implementing section 706 we received is made by GI, which recommends that we make Internet access and advanced services eligible for universal service support,¹⁵⁴⁵ both of which we are implementing for schools and libraries under the authority of section 254. Thus, we defer action on section 706 until we can develop a more complete record through a separate proceeding. We agree with the Joint Board, therefore, and decline to consider section 706 in the context of this proceeding.

605. Although we do not rely on section 706 in this proceeding, we note that section 706 reinforces the goals of section 254 by requiring the Commission and the states to encourage carriers to deploy "advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms)" through the utilization of "price cap regulation, regulatory forbearance, measures that promote competition in local telecommunications market, or other regulating methods that remove barriers to infrastructure investment."¹⁵⁴⁶ We support the goals of section 706, as evidenced by our actions in this proceeding, and will consider section 706 separately rather than in this rulemaking proceeding.

¹⁵⁴² Recommended Decision, 12 FCC Rcd at 403.

¹⁵⁴³ Recommended Decision, 12 FCC Rcd at 404.

¹⁵⁴⁴ 1996 Act, sec. 706(b).

¹⁵⁴⁵ GI reply comments at 3-4.

¹⁵⁴⁶ 1996 Act, sec. 706(a).

Moreover, we agree with the Joint Board's recommendation, as well as its underlying reasoning, that we not rely on section 708 to provide advanced services to schools and libraries within the context of this proceeding. We also agree with the Joint Board and conclude that section 708 should be considered further after implementation of section 254.¹⁵⁴⁷

H. Initiation

1. Background

606. The Joint Board recommended that the Commission adopt rules that will permit schools and libraries to begin using discounted services ordered pursuant to section 254(h) at the start of the 1997 - 1998 school year.¹⁵⁴⁸ The Joint Board anticipated that schools and libraries may begin complying with the self-certification requirements as soon as the Commission's rules become effective.¹⁵⁴⁹

2. Discussion

607. We concur with the Joint Board's recommendation and conclude that we adopt rules implementing the schools and libraries discount program at the start of the 1997 - 1998 school year. As discussed above, we also conclude that the funding year will be the calendar year and that support will begin to flow on January 1, 1998.

¹⁵⁴⁷ Recommended Decision, 12 FCC Rcd at 404.

¹⁵⁴⁸ Recommended Decision, 12 FCC Rcd at 409.

¹⁵⁴⁹ Recommended Decision, 12 FCC Rcd at 409.